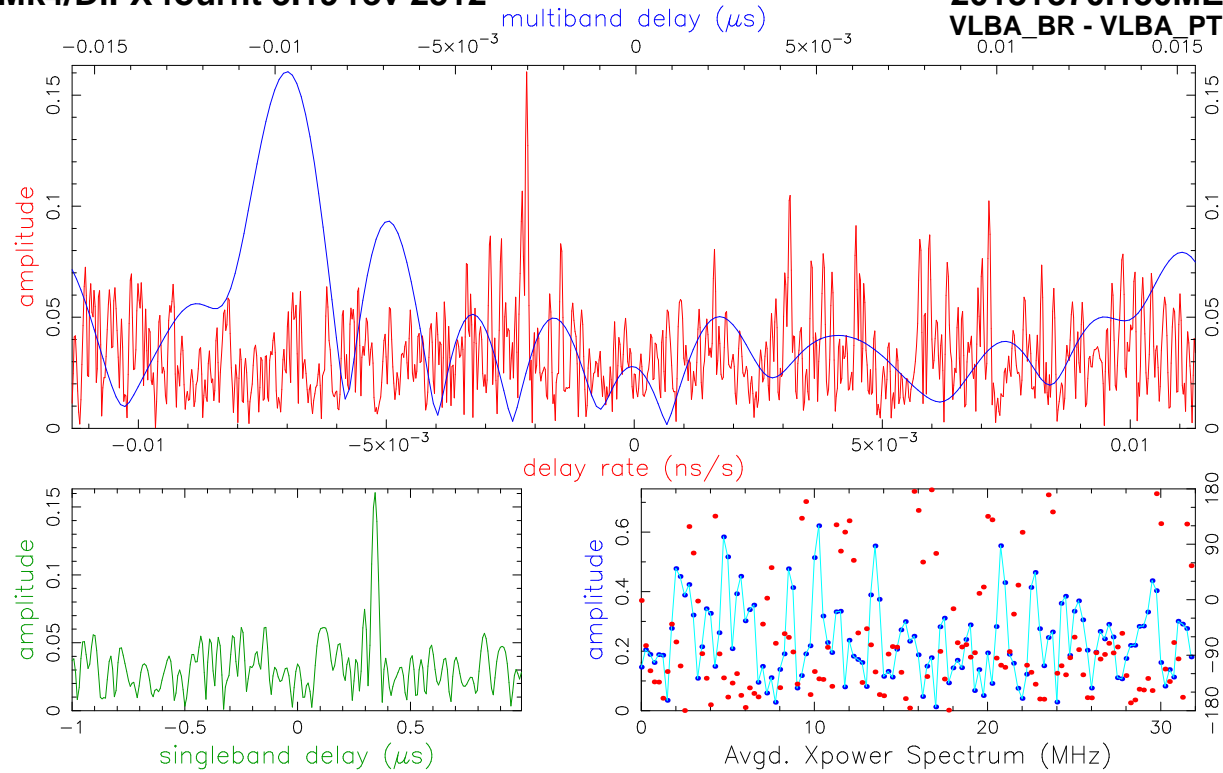


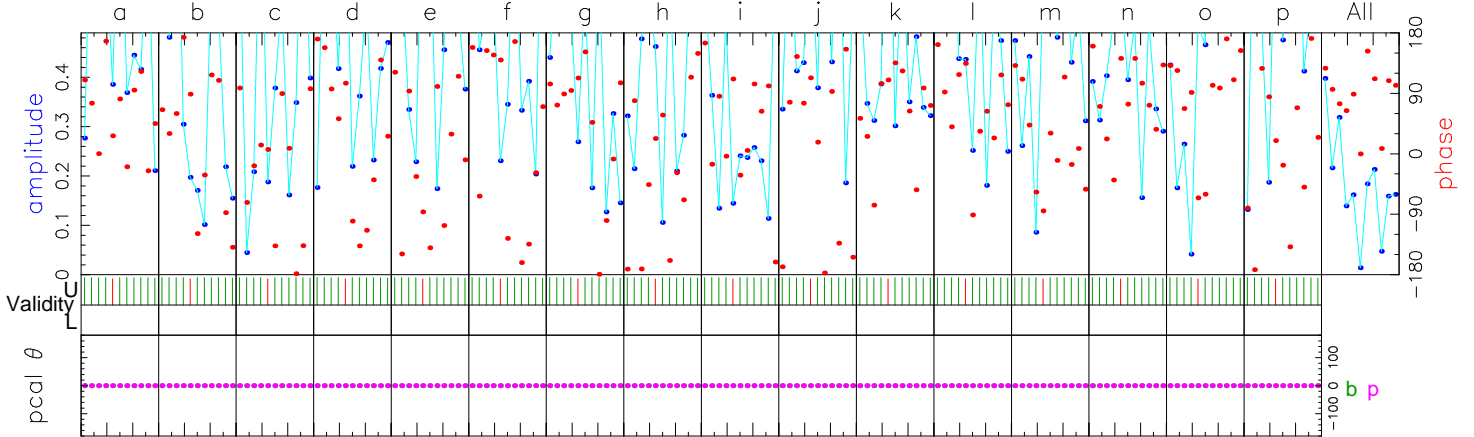
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, bp
VLBA_BR - VLBA_PT, fgroup W, pol LL



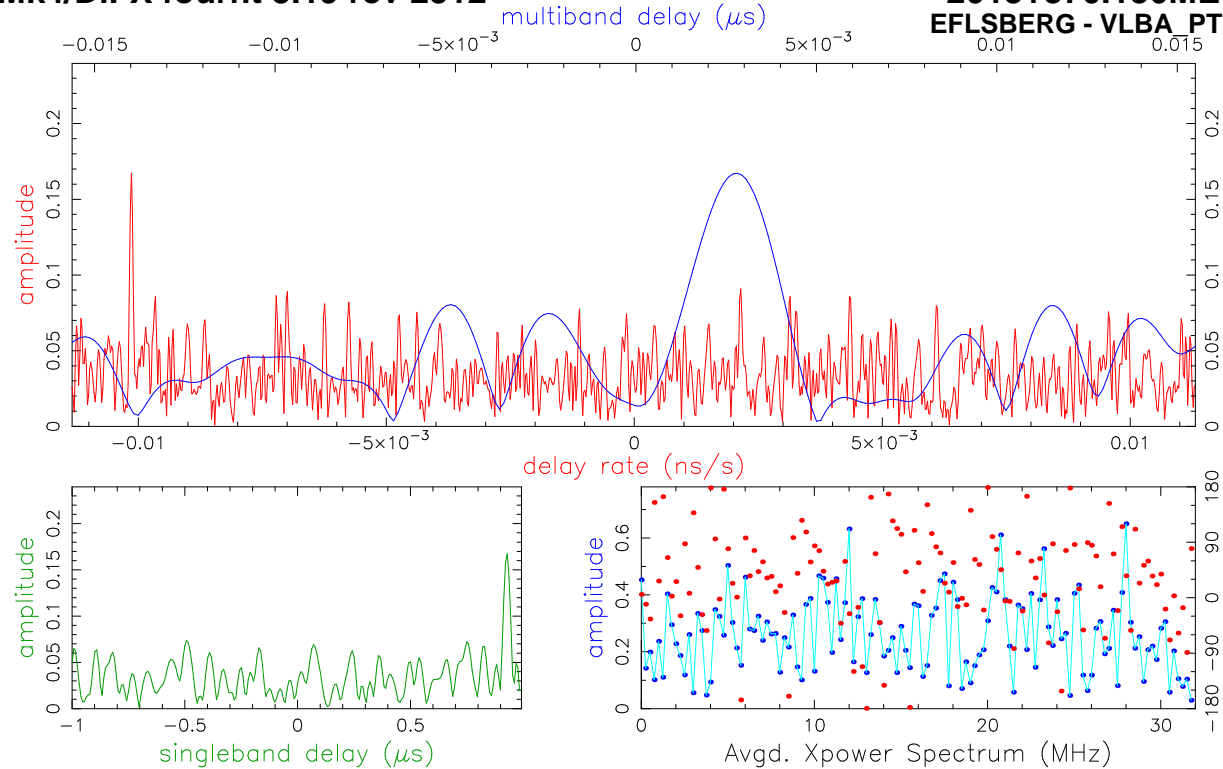
Fringe quality 0
SNR 5.9
Int time 178.316
Amp 0.163
Phase 102.4
PFD 4.1e-01
Delays (us)
SBD 0.342408
MBD -0.009697
Fringe rate (Hz)
-0.186671
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054404
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
63.5	80.1	89.7	129.3	152.8	162.6	104.7	167.0	78.2	146.8	85.5	78.5	26.5	90.9	123.5	138.6	138.6	Phase	102.4
0.3	0.3	0.1	0.2	0.1	0.3	0.3	0.1	0.1	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.1	Ampl.	0.2
241.7	6.7	231.8	245.1	122.7	183.0	39.3	21.9	134.7	174.5	15.7	70.5	132.7	203.8	212.6	137.3	137.3	Sbd box	172.8
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	
b	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	
b: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	
b: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	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
p	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)	-1.24802488888E+03			Apriori delay (usec)			-1.24835894221E+03			Resid mbdelay (usec)			-9.69668E-03			+/- 1.8E-04		
Sband delay (usec)	-1.24801653421E+03			Apriori clock (usec)			-1.2608109E+01			Resid sbdelay (usec)			3.42408E-01			+/- 2.9E-03		
Phase delay (usec)	-1.24835893890E+03			Apriori clockrate (us/s)			-4.4628166E-07			Resid phdelay (usec)			3.30218E-06			+/- 6.3E-07		
Delay rate (us/s)	7.20827540284E-02			Apriori rate (us/s)			7.20849210994E-02			Resid rate (us/s)			-2.16707E-06			+/- 6.0E-09		
Total phase (deg)	1.0			Apriori accel (us/s/s)			1.89324309560E-05			Resid phase (deg)			102.4			+/- 19.5		
ph/seg (deg)	RMS	Theor.	Amplitude		0.163 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000			
amp/seg (%)	48.1	32.3	Search (1024X64)		0.157		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016 0.016					
ph/frq (deg)	65.7	56.4	Interp.		0.000		Sample rate(MSamp/s): 64				dr window (ns/s)		-0.011 0.011					
amp/frq (%)	41.7	39.0	Inc. seg. avg.		0.160		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00 0.00			
	64.8	68.1	Inc. frq. avg.		0.164													

b: az 100.8 el 62.8 pa -55.3 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -501.826 2410.501 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/bp..130MEY Output file: /Exps/c192c/v2/1234/No0072/bp.W.24.130MEY

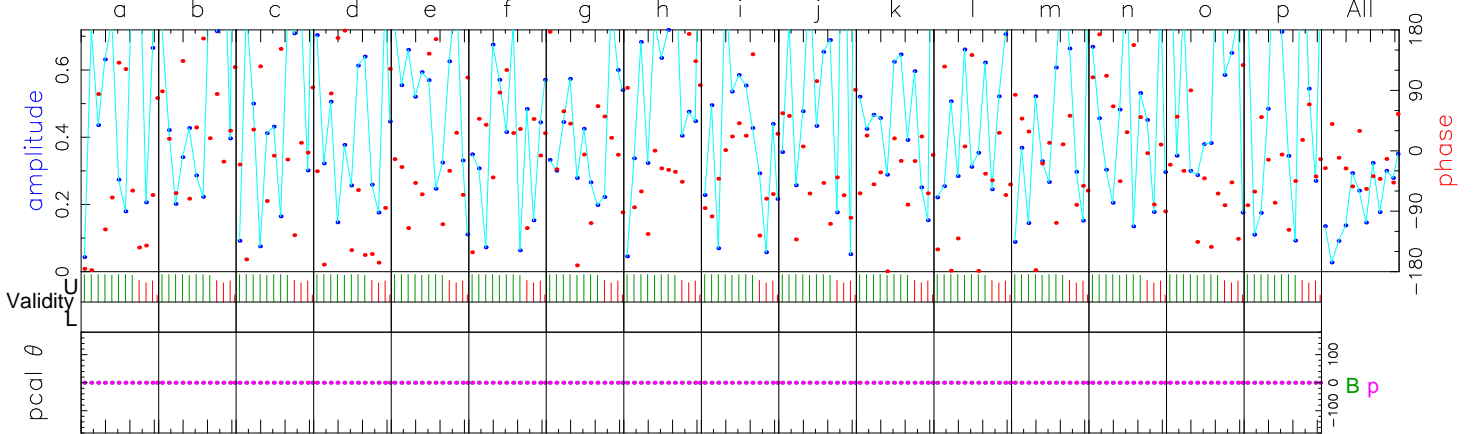


Fringe quality 0

SNR 5.9
Int time 165.758
Amp 0.240
Phase -25.8
PFD 3.3e-01
Delays (us)
SBD 0.927841
MBD 0.002761
Fringe rate (Hz) -0.874157
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010259.71
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054406
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-120.0	41.6	-24.8	-123.5	-48.0	26.8	17.9	-36.6	-6.2	-36.1	-23.5	-64.8	-4.5	43.5	-54.7	-33.0	Phase	-25.8				
	0.3	0.4	0.2	0.2	0.4	0.2	0.3	0.4	0.3	0.3	0.5	0.2	0.2	0.3	0.5	0.5	Ampl.	0.3				
	253.1	128.2	39.3	223.0	157.7	177.7	33.6	233.3	223.3	56.9	253.3	175.3	109.4	56.1	185.2	247.3	Sbd box	247.8				
U/L	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	APs used					
B	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 freqs					
B: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					
B: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					
B	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	PC amp					
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.07650525127E+04														Apriori delay (usec)	-1.07659927736E+04	Resid mbdelay (usec)	2.76098E-03	+/-	1.8E-04
Sband delay (usec)			-1.07650649326E+04														Apriori clock (usec)	4.8139639E+00	Resid sbdelay (usec)	9.27841E-01	+/-	2.9E-03
Phase delay (usec)			-1.07659927745E+04														Apriori clockrate (us/s)	-4.0388659E-07	Resid phdelay (usec)	-8.33154E-07	+/-	6.2E-07
Delay rate (us/s)			-1.17506984187E+00														Apriori rate (us/s)	-1.17505969377E+00	Resid rate (us/s)	-1.01481E-05	+/-	6.3E-09
Total phase (deg)																	Apriori accel (us/s/s)	7.14987055923E-05	Resid phase (deg)	-25.8	+/-	19.3

ph/seg (deg) 33.6 32.7
amp/seg (%) 58.8 57.1
ph/frq (deg) 51.0 38.7
amp/frq (%) 56.9 67.5

RMS Theor. Amplitude 0.240 +/- 0.040
Search (1024X64) 0.161
Interp. 0.000
Inc. seg. avg. 0.237
Inc. frq. avg. 0.262

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

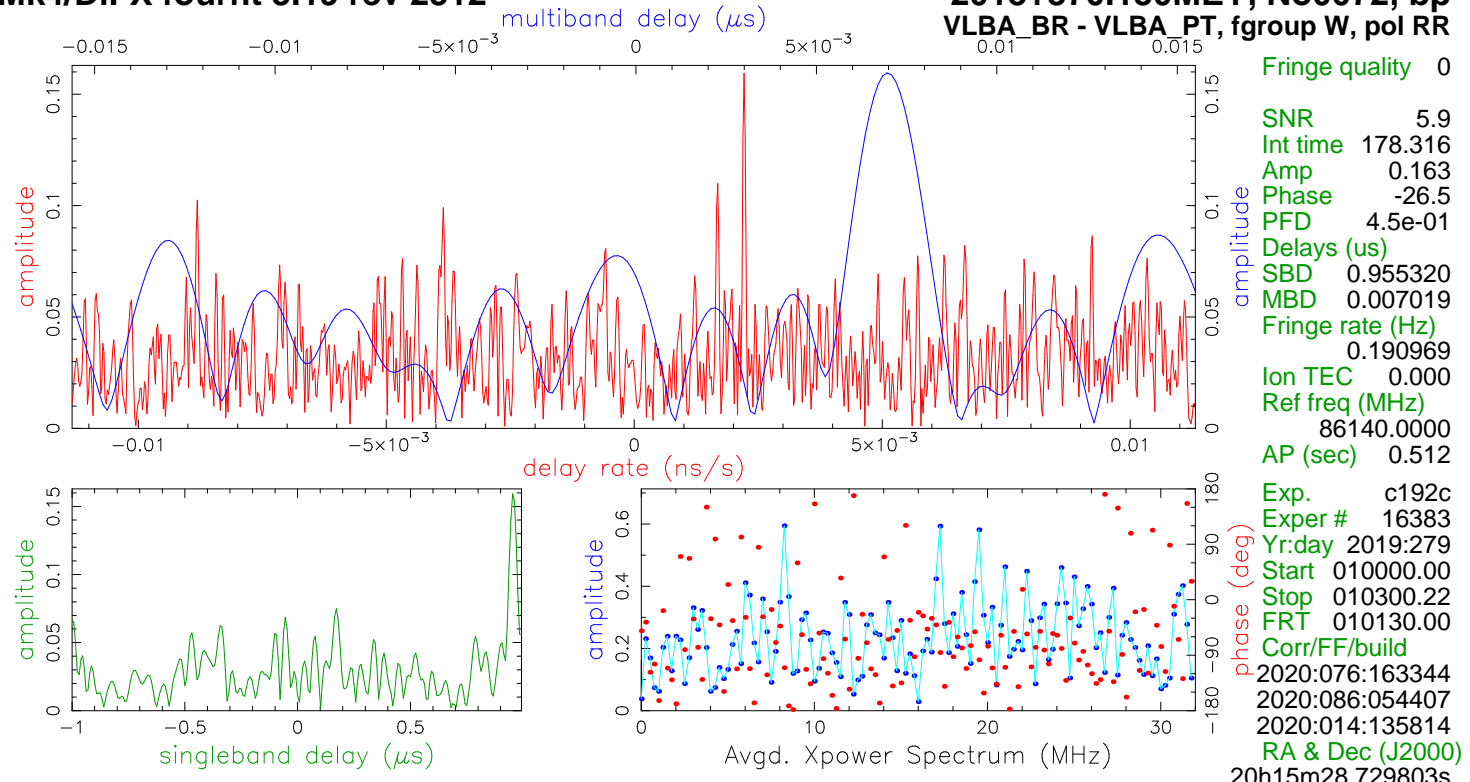
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

B: az 297.2 el 26.6 pa 45.3 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 8511.118 5689.376 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Bp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Bp.W.37.130MEY

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, bp
VLBA_BR - VLBA_PT, fgroup W, pol RR



Fringe quality 0

SNR 5.9

Int time 178.316

Amp 0.163

Phase -26.5

PFD 4.5e-01

Delays (us)

SBD 0.955320

MBD 0.007019

Fringe rate (Hz)

0.190969

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:279

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:076:163344

2020:086:054407

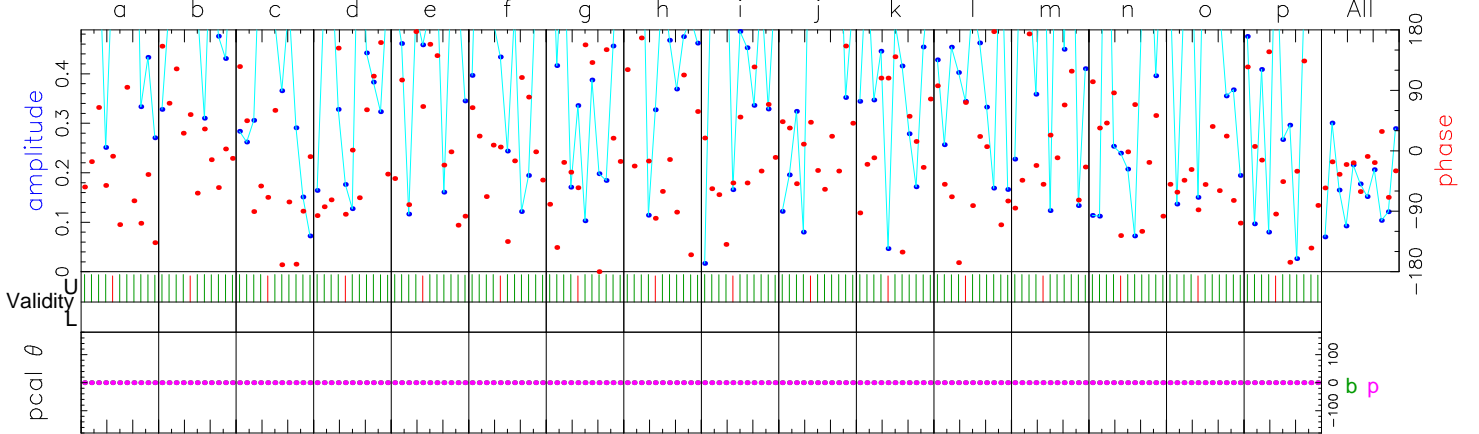
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-49.5	25.6	-71.0	-70.2	178.7	-2.8	-45.7	-105.4	-44.2	4.7	34.3	-68.4	-17.1	-3.0	-35.7	-121.3	Phase	-26.5
	0.4	0.3	0.1	0.2	0.0	0.3	0.2	0.0	0.3	0.4	0.1	0.1	0.2	0.1	0.4	0.1	Ampl.	0.2
	249.3	250.3	107.1	60.0	176.7	194.7	91.1	242.5	98.3	185.7	24.8	53.1	223.1	26.7	251.1	24.2	Sbd box	251.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b: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	
b: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	
b	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	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	-1.24741442296E+03			Apriori delay (usec)			-1.24835894221E+03			Resid mbdelay (usec)			7.01925E-03			+/- 1.8E-04		
Sband delay (usec)	-1.24740362271E+03			Apriori clock (usec)			-1.2608109E+01			Resid sbdelay (usec)			9.55320E-01			+/- 2.9E-03		
Phase delay (usec)	-1.24835894306E+03			Apriori clockrate (us/s)			-4.4628166E-07			Resid phdelay (usec)			-8.53922E-07			+/- 6.3E-07		
Delay rate (us/s)	7.20871380586E-02			Apriori rate (us/s)			7.20849210994E-02			Resid rate (us/s)			2.21696E-06			+/- 6.1E-09		
Total phase (deg)	-127.8			Apriori accel (us/s/s)			1.89324309560E-05			Resid phase (deg)			-26.5			+/- 19.6		

ph/seg (deg) RMS Theor. Amplitude 0.163 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 26.3 32.4 Search (1024X64) 0.157 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

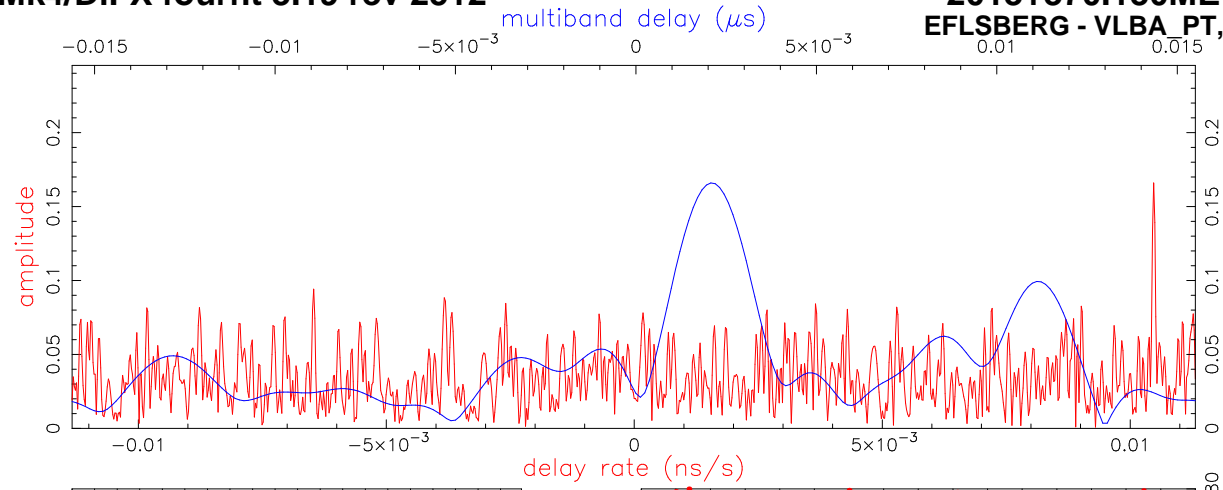
ph/frq (deg) 45.7 56.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 62.5 39.1 Inc. seg. avg. 0.151 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

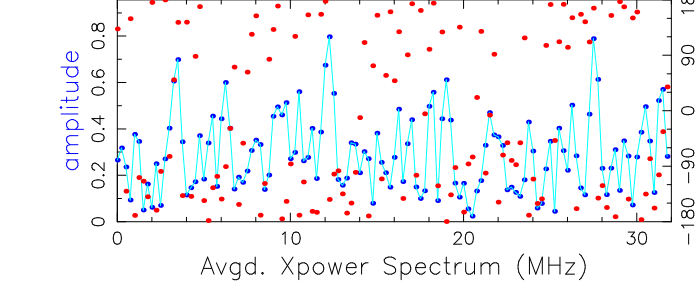
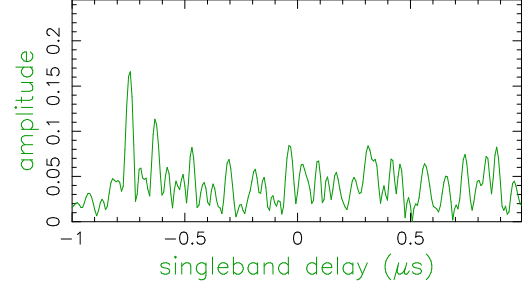
amp/frq (%) 77.1 68.3 Inc. frq. avg. 0.167 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 100.8 el 62.8 pa -55.3 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -501.826 2410.501 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/bp..130MEY Output file: /Exps/c192c/v2/1234/No0072/bp.W.42.130MEY

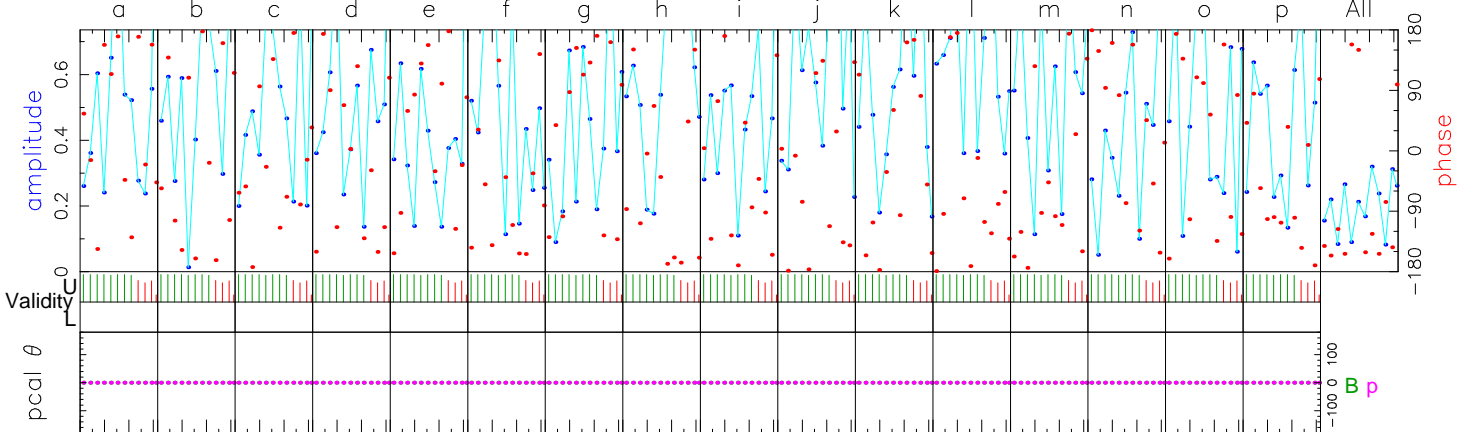


Fringe quality 0
SNR 5.9
Int time 165.758
Amp 0.245
Phase -152.6
PFD 3.6e-01
Delays (us)
SBD -0.744770
MBD 0.002112
Fringe rate (Hz) 0.902842
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010259.71
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054408
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 31 APs / seg (15.87 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					
	-168.9	-148.2	-83.9	-163.7	165.0	-127.5	148.5	-159.3	-120.0	-110.2	171.7	-137.6	-131.7	164.8	160.7	-110.2	Phase	-152.6					
	0.2	0.4	0.2	0.2	0.1	0.4	0.4	0.4	0.2	0.1	0.3	0.7	0.5	0.1	0.3	0.2	Ampl.	0.2					
	121.0	70.4	88.9	59.1	247.7	74.2	138.6	206.7	210.0	157.9	200.5	33.0	195.6	175.6	169.0	251.9	Sbd box	33.7					
U/L	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	APs used						
B	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						
B: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						
B: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						
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids						
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks						
B	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)			-1.07667406615E+04														Apriori delay (usec)	-1.07659927736E+04	Resid mbdelay (usec)	2.11217E-03	+/-	1.8E-04	
Sband delay (usec)			-1.07667375436E+04															Apriori clock (usec)	4.8139639E+00	Resid sbdelay (usec)	-7.44770E-01	+/-	2.9E-03
Phase delay (usec)			-1.07659927786E+04															Apriori clockrate (us/s)	-4.0388659E-07	Resid phdelay (usec)	-4.91942E-06	+/-	6.3E-07
Delay rate (us/s)			-1.17504921267E+00															Apriori rate (us/s)	-1.17505969377E+00	Resid rate (us/s)	1.04811E-05	+/-	6.3E-09
Total phase (deg)				-340.4														Apriori accel (us/s/s)	7.14987055923E-05	Resid phase (deg)	-152.6	+/-	19.4

ph/seg (deg) 38.0 32.8
amp/seg (%) 51.2 57.3
ph/frq (deg) 39.3 38.8
amp/frq (%) 60.9 67.7

RMS Theor. Amplitude 0.245 +/- 0.042
Search (1024X64) 0.158
Interp. 0.000
Inc. seg. avg. 0.246
Inc. frq. avg. 0.235

Group delay (usec)(sbd) -1.07667406615E+04
Sband delay (usec) -1.07667375436E+04
Phase delay (usec) -1.07659927786E+04
Delay rate (us/s) -1.17504921267E+00
Total phase (deg) -340.4

Apriori delay (usec) -1.07659927736E+04
Apriori clock (usec) 4.8139639E+00
Apriori clockrate (us/s) -4.0388659E-07
Apriori rate (us/s) -1.17505969377E+00
Apriori accel (us/s/s) 7.14987055923E-05

Resid mbdelay (usec) 2.11217E-03
Resid sbdelay (usec) -7.44770E-01
Resid phdelay (usec) -4.91942E-06
Resid rate (us/s) 1.04811E-05
Resid phase (deg) -152.6

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

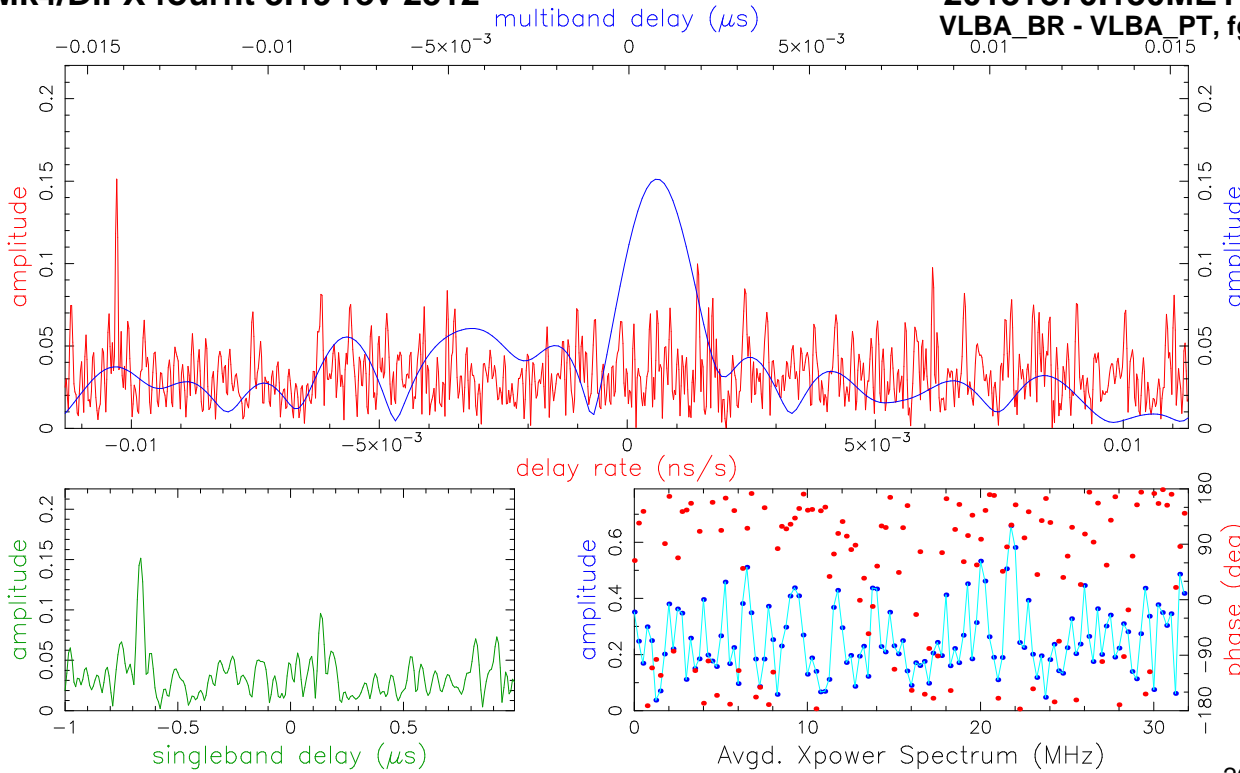
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

B: az 297.2 el 26.6 pa 45.3 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 8511.118 5689.376 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Bp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Bp.W.57.130MEY

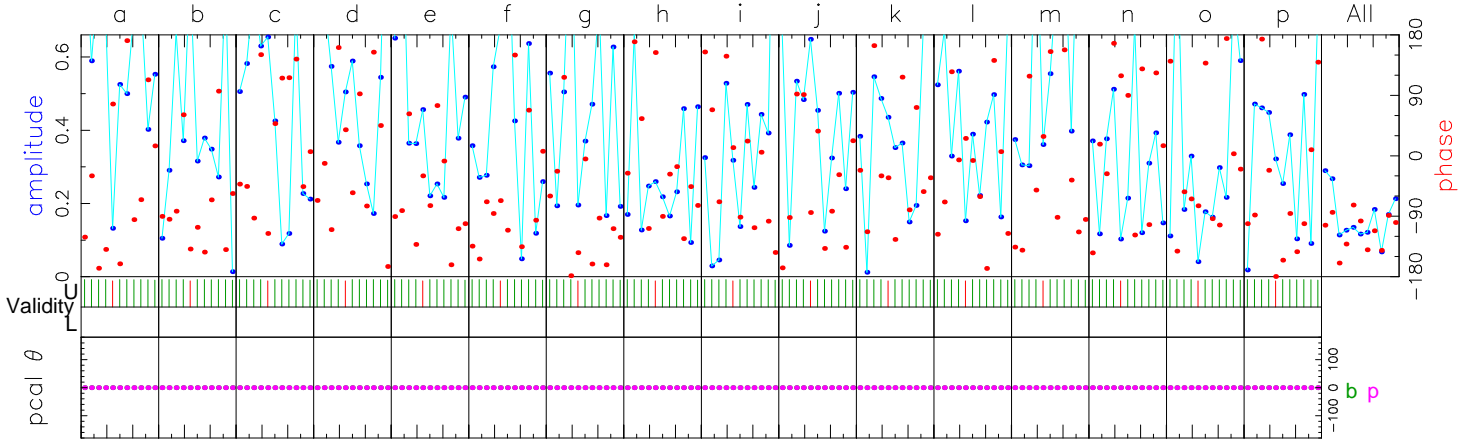
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, bp
VLBA_BR - VLBA_PT, fgroup W, pol LR



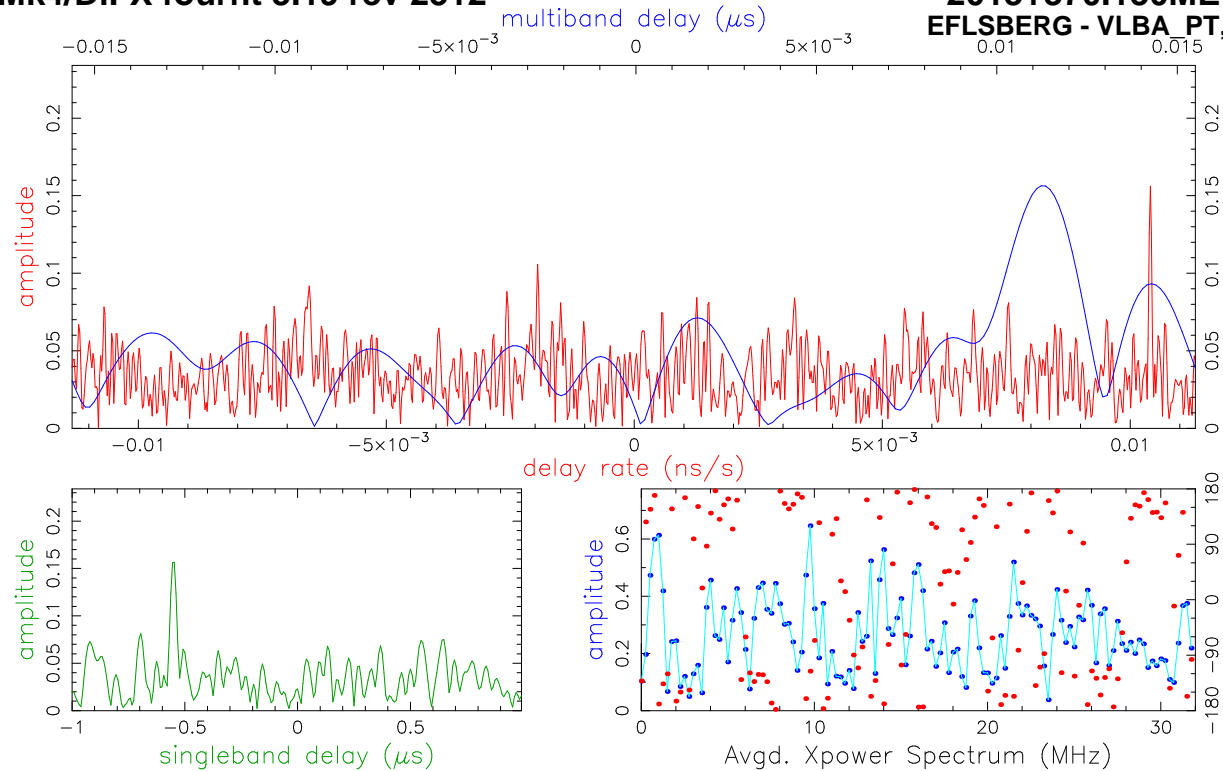
Fringe quality 0
SNR 5.6
Int time 178.316
Amp 0.220
Phase -105.8
PFD 9.6e-01
Delays (us)
SBD -0.666210
MBD 0.000755
Fringe rate (Hz)
-0.889052
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054409
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



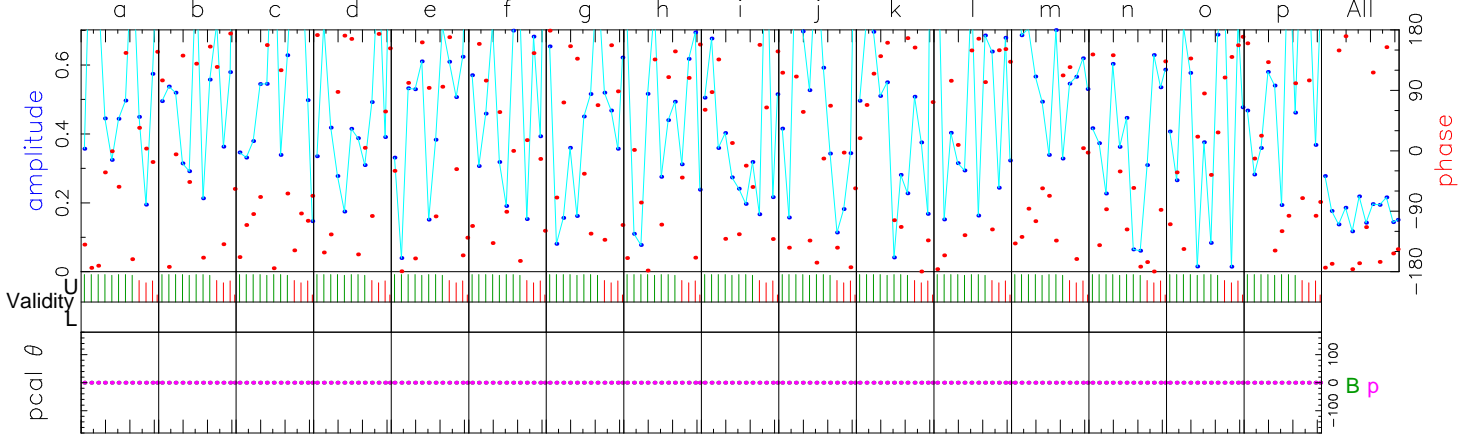
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-122.3	-117.7	-96.9	-73.1	-92.1	-100.6	-127.6	-109.3	-132.0	-23.1	-44.8	-87.4	-113.0	-157.7	-79.5	-135.0	Phase	-105.8
	0.4	0.4	0.1	0.2	0.4	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.4	0.1	0.2	0.2	Ampl.	0.2
	44.4	141.6	60.4	105.4	184.6	245.9	40.7	217.4	127.6	146.1	249.7	209.7	99.4	61.5	111.4	235.3	Sbd box	43.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b: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	
b: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	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	-1.24901443700E+03			Apriori delay (usec)			-1.24835894221E+03			Resid mbdelay (usec)			7.55207E-04			+/-	1.9E-04	
Sband delay (usec)	-1.24902515171E+03			Apriori clock (usec)			-1.2608109E+01			Resid sbdelay (usec)			-6.66210E-01			+/-	3.1E-03	
Phase delay (usec)	-1.24835894562E+03			Apriori clockrate (us/s)			-4.4628166E-07			Resid phdelay (usec)			-3.41131E-06			+/-	6.6E-07	
Delay rate (us/s)	7.20746000919E-02			Apriori rate (us/s)			7.20849210994E-02			Resid rate (us/s)			-1.03210E-05			+/-	6.4E-09	
Total phase (deg)	-207.1			Apriori accel (us/s/s)			1.89324309560E-05			Resid phase (deg)			-105.8			+/-	20.6	

ph/seg (deg) 26.8 34.1 Amplitude 0.220 +/- 0.040 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.8 59.6 Search (1024X64) 0.146 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.0 41.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 49.8 71.8 Inc. seg. avg. 0.202 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.194 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 b: az 100.8 el 62.8 pa -55.3 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -501.826 2410.501 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/bp..130MEY Output file: /Exps/c192c/v2/1234/No0072/bp.W.61.130MEY



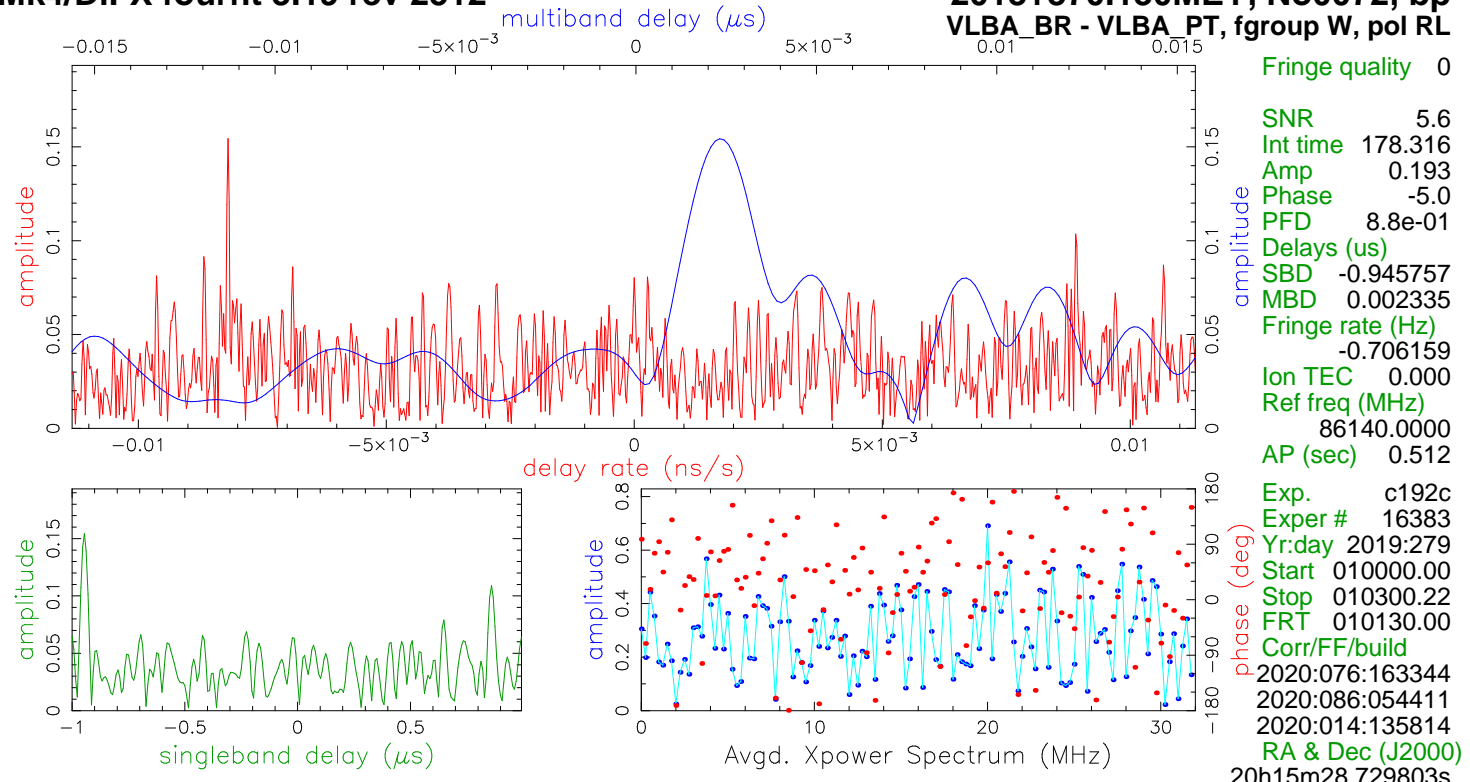
Fringe quality 0
SNR 5.7
Int time 165.758
Amp 0.234
Phase -179.2
PFD 8.5e-01
Delays (us)
SBD -0.550743
MBD 0.011354
Fringe rate (Hz)
0.898553
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010259.71
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054410
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

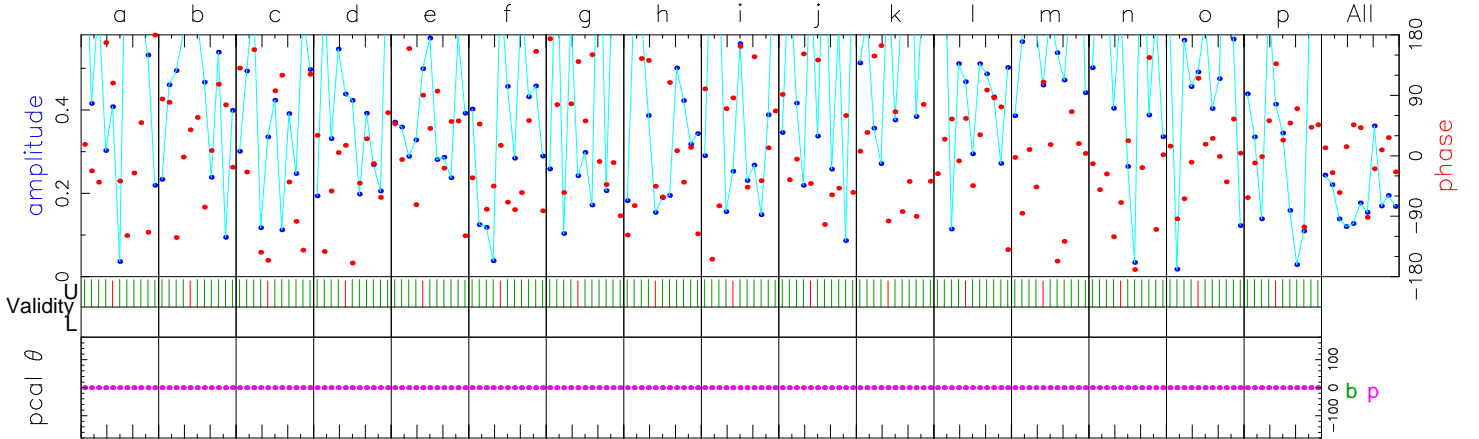


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0	335/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	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		
B: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		
B: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		
B	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		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-1.07665439199E+04															
Sband delay (usec)			-1.07665435161E+04															
Phase delay (usec)			-1.07659927794E+04															
Delay rate (us/s)			-1.17504926246E+00															
Total phase (deg)					-7.0													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

B: az 297.2 el 26.6 pa 45.3 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 8511.118 5689.376 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Bp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Bp.W.72.130MEY



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



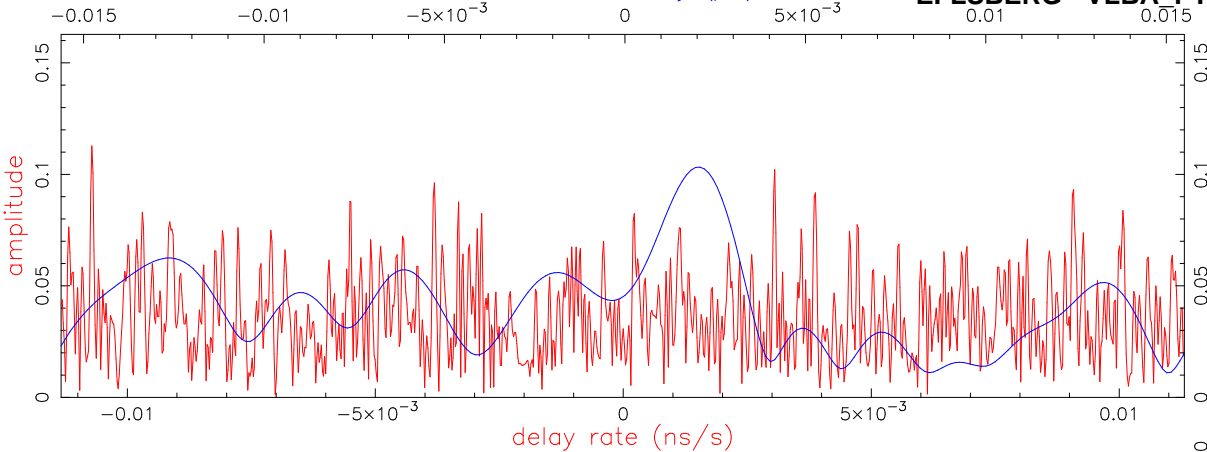
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-37.6	33.7	174.7	-1.7	43.6	-34.4	4.3	-61.4	117.5	-50.7	-26.9	28.8	1.9	-43.9	2.1	34.8		Phase	-5.0
	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.4	0.3	0.3	0.3	0.4	0.4	0.3		Ampl.	0.2
	57.8	10.9	44.4	37.6	181.4	210.9	39.5	32.8	222.2	22.5	243.6	215.7	222.8	7.4	99.4	9.5		Sbd box	7.9
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	
b	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	
b: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	
b: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	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
b	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)	-1.24929410754E+03			Apriori delay (usec)			-1.24835894221E+03			Resid mbdelay (usec)			2.33466E-03			+/- 1.9E-04			
Sband delay (usec)	-1.24930469921E+03			Apriori clock (usec)			-1.2608109E+01			Resid sbdelay (usec)			-9.45757E-01			+/- 3.1E-03			
Phase delay (usec)	-1.24835894237E+03			Apriori clockrate (us/s)			-4.4628166E-07			Resid phdelay (usec)			-1.62728E-07			+/- 6.6E-07			
Delay rate (us/s)	7.20767232933E-02			Apriori rate (us/s)			7.20849210994E-02			Resid rate (us/s)			-8.19781E-06			+/- 6.3E-09			
Total phase (deg)	-106.4			Apriori accel (us/s/s)			1.89324309560E-05			Resid phase (deg)			-5.0			+/- 20.3			

	RMS	Theor.	Amplitude	0.193 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	40.0	33.7	Search (1024X64)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	48.0	58.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	67.3	40.6	Inc. seg. avg.	0.202	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	62.0	70.9	Inc. frq. avg.	0.205	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 100.8 el 62.8 pa -55.3 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -501.826 2410.501 simultaneous interpolator

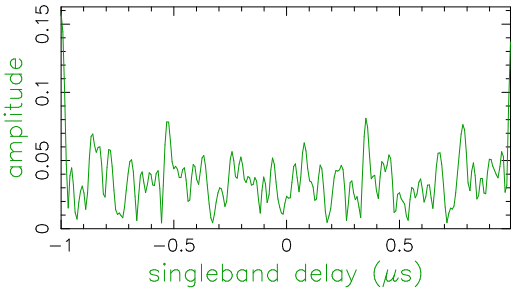
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/bp..130MEY Output file: /Exps/c192c/v2/1234/No0072/bp.W.78.130MEY

multiband delay (μ s)

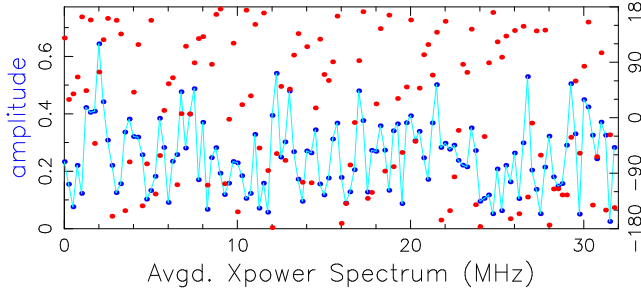


Fringe quality 0

SNR 5.6
Int time 165.758
Amp 0.163
Phase 121.7
PFD 9.6e-01
Delays (us)
SBD -0.999545
MBD 0.001854
Fringe rate (Hz) 0.264385
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

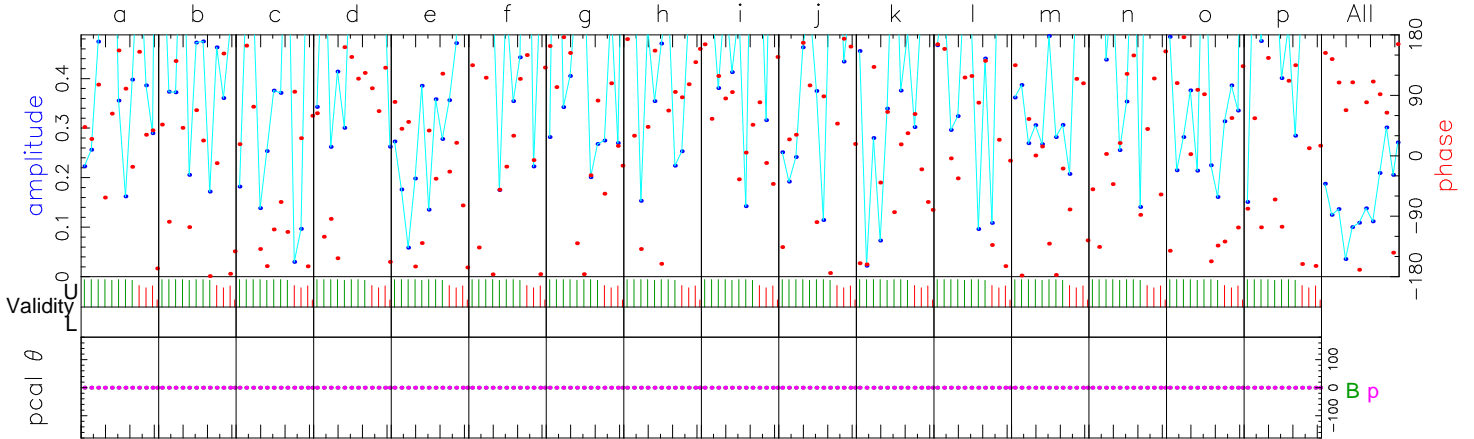


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010259.71
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054412
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

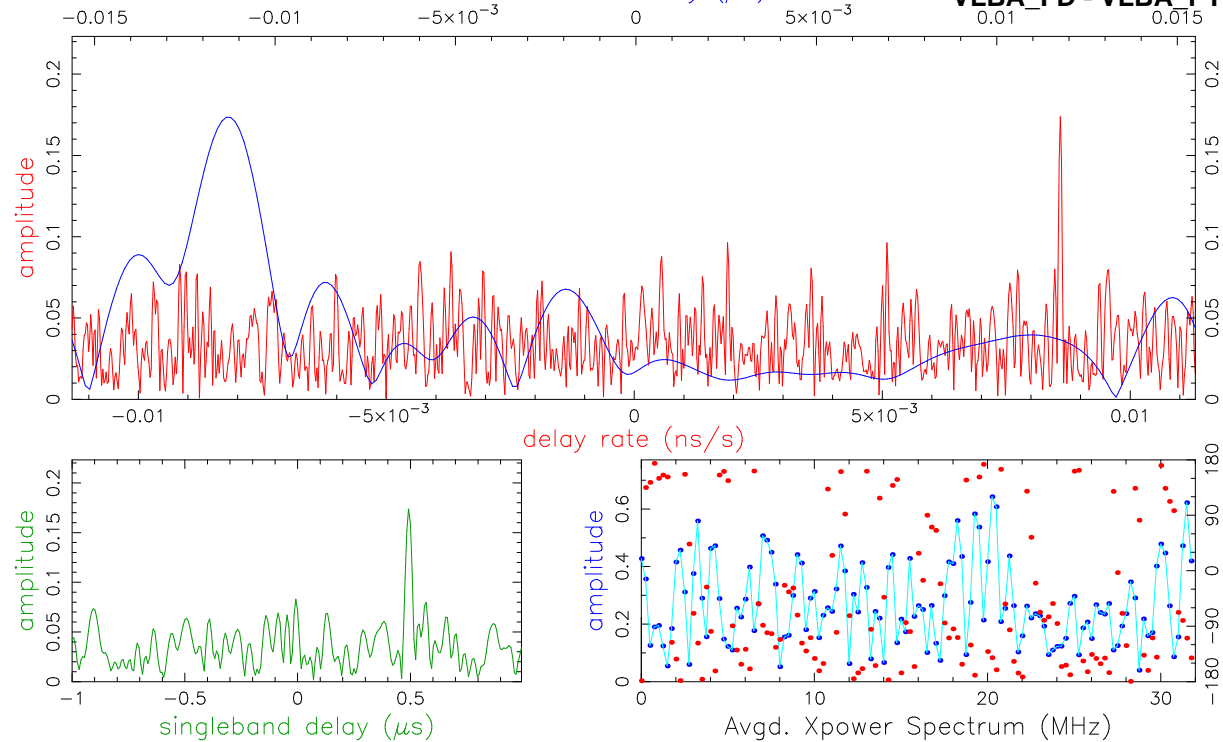


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	69.0	57.9	-149.8	134.9	-50.5	148.1	142.2	123.0	58.6	137.8	-35.5	126.3	141.3	57.9	141.7	-173.9	Phase	121.7
B	0.2	0.2	0.1	0.3	0.1	0.3	0.2	0.3	0.3	0.2	0.1	0.2	0.1	0.0	0.1	0.1	Ampl.	0.1
p	163.0	210.3	236.7	161.9	19.7	255.5	10.7	128.6	80.1	189.0	141.0	122.8	84.9	146.4	215.4	255.2	Sbd box	1.1
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B: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	
B: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	
B	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		
B	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-1.07669909194E+04			Apriori delay (usec)			-1.07659927736E+04			Resid mbdelay (usec)			1.85428E-03			+/- 1.9E-04		
Sband delay (usec)	-1.07669923184E+04			Apriori clock (usec)			4.8139639E+00			Resid sbdelay (usec)			-9.99545E-01			+/- 3.1E-03		
Phase delay (usec)	-1.07659927697E+04			Apriori clockrate (us/s)			-4.0388659E-07			Resid phdelay (usec)			3.92481E-06			+/- 6.6E-07		
Delay rate (us/s)	-1.17505662453E+00			Apriori rate (us/s)			-1.17505969377E+00			Resid rate (us/s)			3.06924E-06			+/- 6.7E-09		
Total phase (deg)	-66.1			Apriori accel (us/s/s)			7.14987055923E-05			Resid phase (deg)			121.7			+/- 20.6		
	RMS	Theor.	Amplitude		0.163 +/- 0.029		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5									
ph/seg (deg)	45.5	34.9	Search (1024X64)		0.152		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000					
amp/seg (%)	42.4	60.9	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016		0.016			
ph/frq (deg)	77.3	41.2	Inc. seg. avg.		0.127		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011		0.011					
amp/frq (%)	54.1	71.9	Inc. frq. avg.		0.131		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00		0.00	
B: az 297.2 el 26.6 pa 45.3	p: az 74.3 el 71.3 pa -91.8			u,v (fr/asec) 8511.118 5689.376												simultaneous interpolator		
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Bp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Bp.W.85.130MEY																		

Mk4/DiFX fourfit 3.19 rev 2512

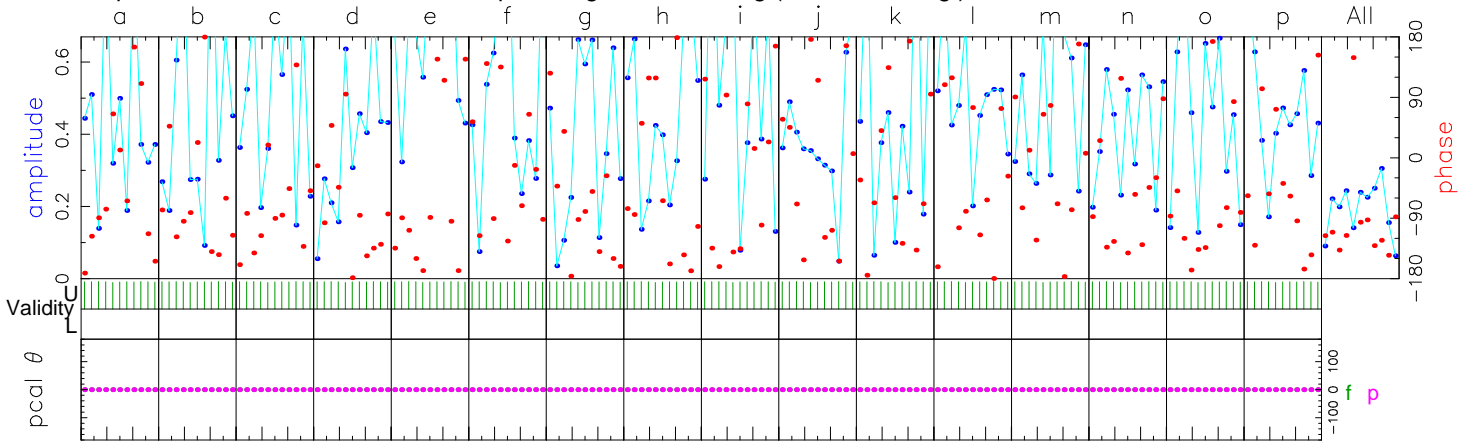
2013+370.130MEY, No0072, fp
VLBA_FD - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)



Fringe quality 0
SNR 6.3
Int time 178.091
Amp 0.223
Phase -120.8
PFD 3.0e-02
Delays (us)
SBD 0.492918
MBD -0.011291
Fringe rate (Hz) 0.741824
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054416
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

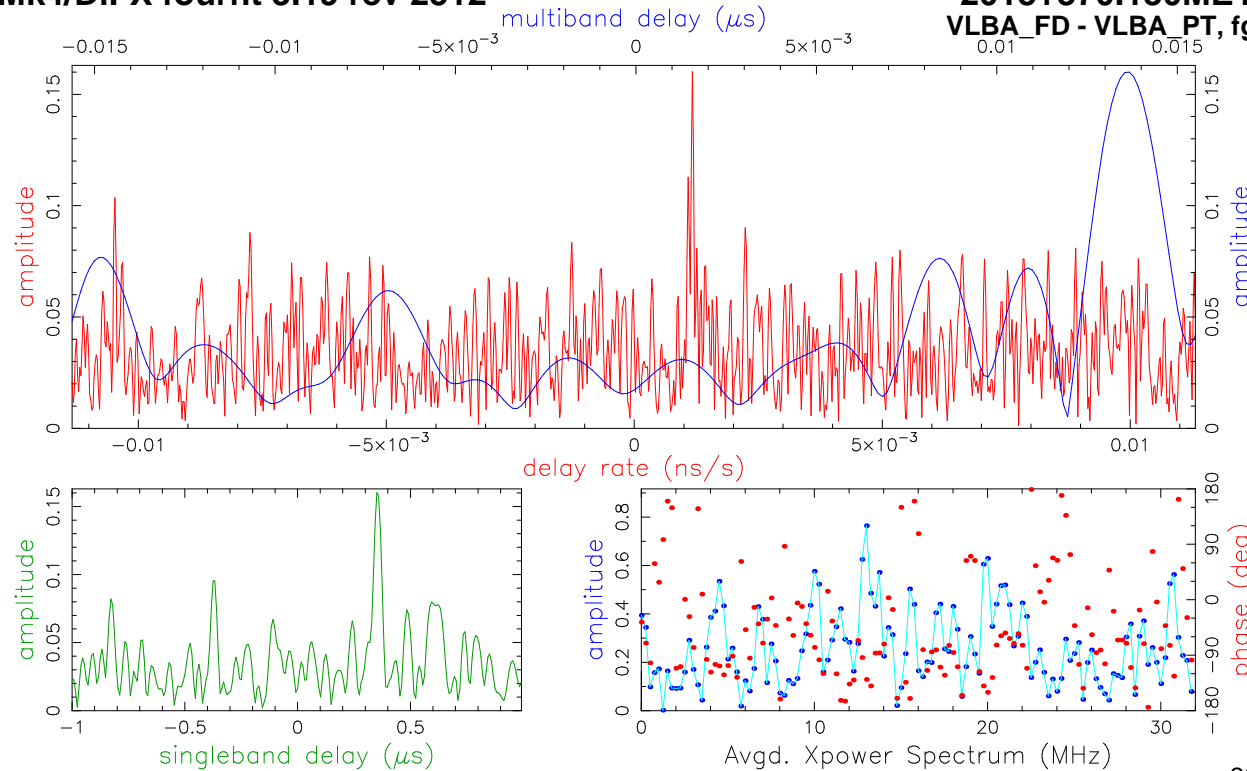


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-134.9	-104.1	-96.5	-125.0	-143.6	-111.6	-103.4	-131.3	-169.9	168.0	-171.7	-155.3	-47.8	-105.5	-119.0	-103.5	Phase	-120.8	
	0.2	0.5	0.4	0.2	0.5	0.2	0.2	0.3	0.1	0.0	0.2	0.1	0.2	0.2	0.4	0.2	Ampl.	0.2	
	158.5	192.5	93.2	43.8	191.5	200.0	24.4	174.9	40.0	98.1	245.2	166.4	63.1	151.8	113.8	32.3	Sbd box	192.1	
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		
f	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		
fp	0:0	0:0	0:0	0:0	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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids		
																	Tracks		
Group delay (usec)(sbd)			1.98563653176E+02							1.98074943831E+02							Resid mbdelay (usec)	-1.12907E-02	+/- 1.7E-04
Sband delay (usec)			1.98567862331E+02							-1.1511936E+01							Resid sbdelay (usec)	4.92918E-01	+/- 2.7E-03
Phase delay (usec)			1.98074939935E+02							-2.9483610E-07							Resid phdelay (usec)	-3.89602E-06	+/- 5.8E-07
Delay rate (us/s)			-5.66131421830E-02							-5.66217540292E-02							Resid rate (us/s)	8.61185E-06	+/- 5.6E-09
Total phase (deg)				117.4						-4.80171642114E-06							Resid phase (deg)	-120.8	+/- 18.1

ph/seg (deg) 32.4 29.9 Search (1024X64) 0.170 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 42.0 52.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 37.1 36.1 Inc. seg. avg. 0.220 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 60.8 63.0 Inc. frq. avg. 0.208 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 61.8 el 73.3 pa -107.2 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 403.000 -670.016 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/fp..130MEY Output file: /Exps/c192c/v2/1234/No0072/fp.W.101.130MEY simultaneous interpolator

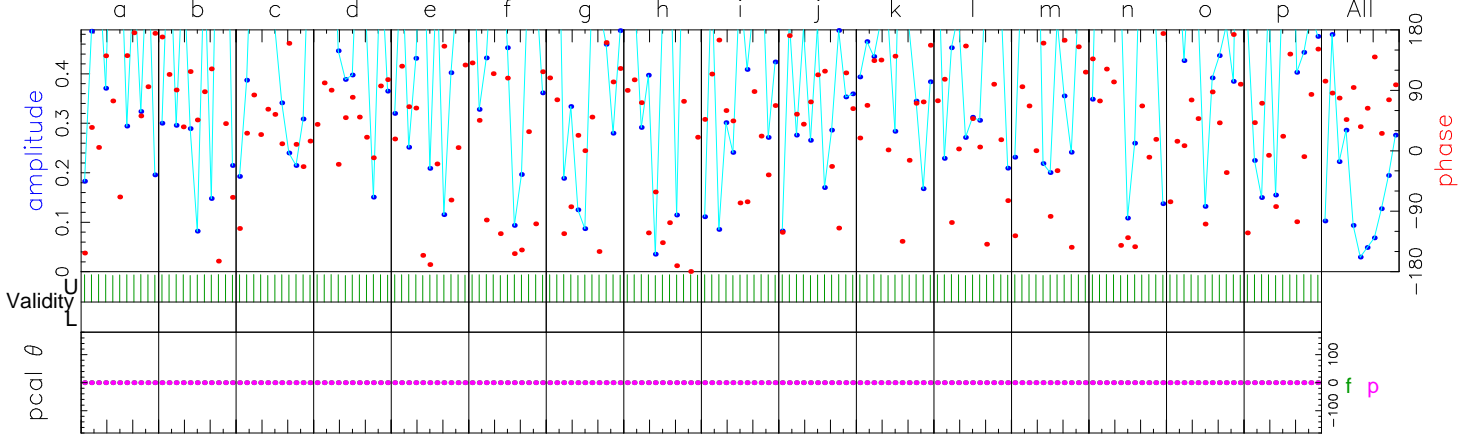
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, fp
VLBA_FD - VLBA_PT, fgroup W, pol RR



Fringe quality 0
SNR 5.9
Int time 178.091
Amp 0.163
Phase 78.0
PFD 3.3e-01
Delays (us)
SBD 0.354714
MBD 0.013633
Fringe rate (Hz) 0.100442
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054418
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

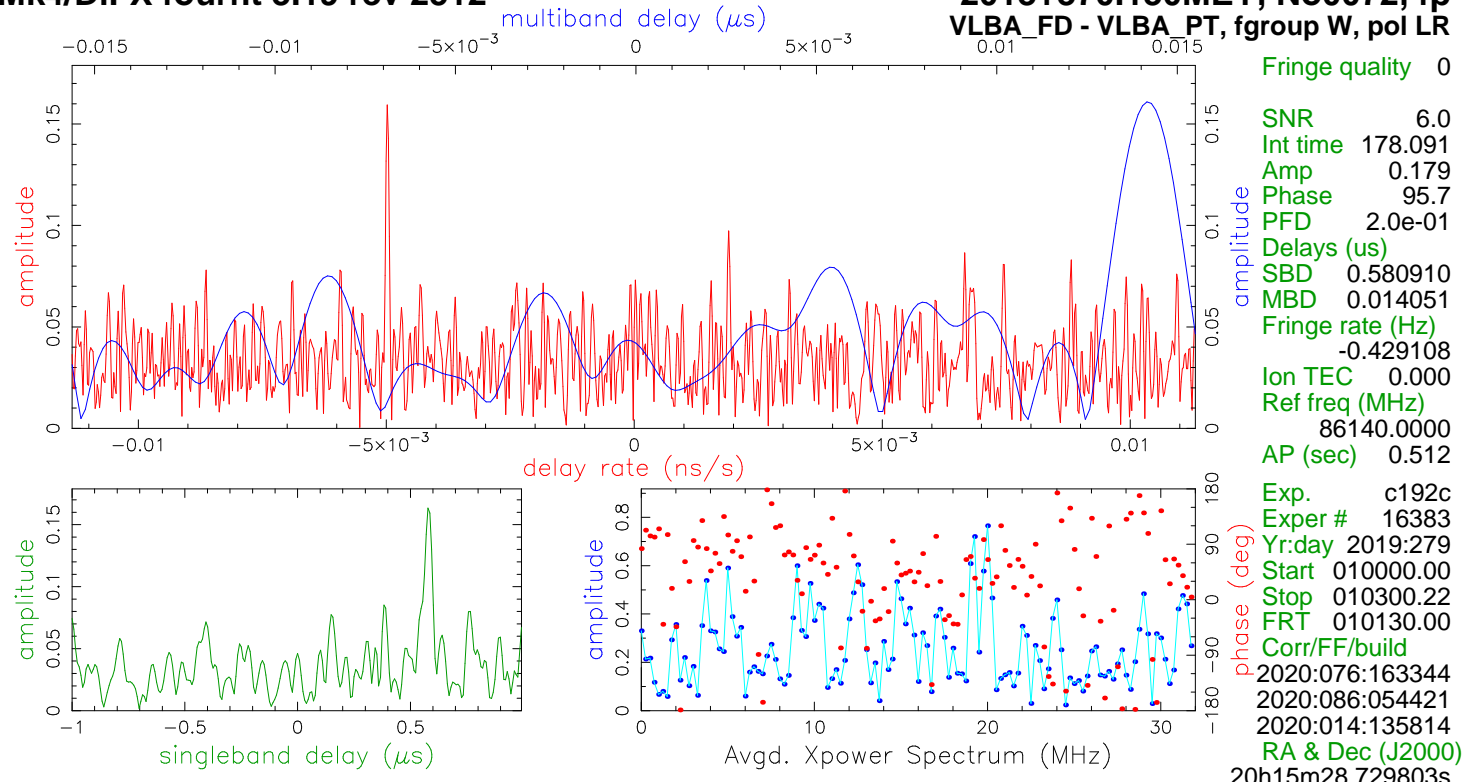


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	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		
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	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		
f	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)	1.98432327057E+02			Apriori delay (usec)			1.98074943831E+02			Resid mbdelay (usec)			1.36332E-02			+/- 1.8E-04		
Sband delay (usec)	1.98429657831E+02			Apriori clock (usec)			-1.1511936E+01			Resid sbdelay (usec)			3.54714E-01			+/- 2.9E-03		
Phase delay (usec)	1.98074946346E+02			Apriori clockrate (us/s)			-2.9483610E-07			Resid phdelay (usec)			2.51442E-06			+/- 6.2E-07		
Delay rate (us/s)	-5.66205879984E-02			Apriori rate (us/s)			-5.66217540292E-02			Resid rate (us/s)			1.16603E-06			+/- 6.0E-09		
Total phase (deg)	316.2			Apriori accel (us/s/s)			-4.80171642114E-06			Resid phase (deg)			78.0			+/- 19.3		

ph/seg (deg) 31.5 32.1 Search (1024X64) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 79.5 56.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 33.4 38.7 Inc. seg. avg. 0.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 61.5 67.5 Inc. frq. avg. 0.150 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 61.8 el 73.3 pa -107.2 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 403.000 -670.016 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/fp..130MEY Output file: /Exps/c192c/v2/1234/No0072/fp.W.120.130MEY

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, fp
VLBA_FD - VLBA_PT, fgroup W, pol LR



Fringe quality 0

SNR 6.0

Int time 178.091

Amp 0.179

Phase 95.7

PFD 2.0e-01

Delays (us)

SBD 0.580910

MBD 0.014051

Fringe rate (Hz)

-0.429108

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:279

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:076:163344

2020:086:054421

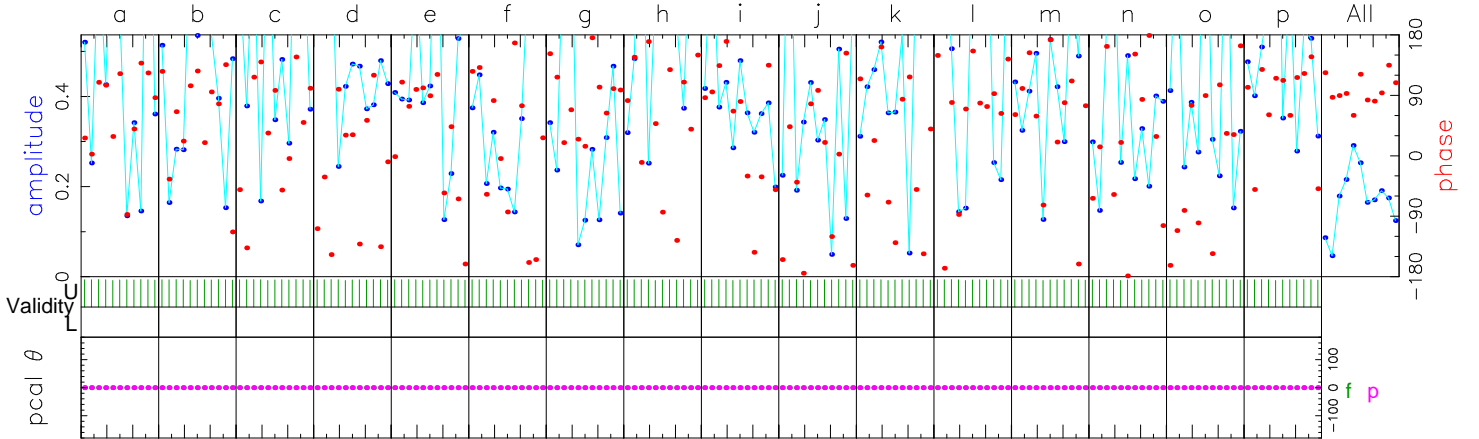
2020:014:135814

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
85.9	87.6	73.0	-84.2	97.8	149.0	76.9	94.3	99.8	65.4	-11.9	119.8	99.4	-111.6	109.7	102.5	102.5	Phase	95.7
0.4	0.3	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.1	0.1	0.4	0.3	0.0	0.1	0.4	0.4	Ampl.	0.2
92.4	161.0	164.4	27.6	76.9	29.5	226.4	134.9	158.6	156.2	150.2	204.5	138.1	65.9	115.1	202.8	202.8	Sbd box	203.4
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f: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	
fp	0:0	0:0	0:0	0:0	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	
p	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	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	1.98651494629E+02			Apriori delay (usec)			1.98074943831E+02			Resid mbdelay (usec)			1.40508E-02			+/- 1.8E-04		
Sband delay (usec)	1.98655853831E+02			Apriori clock (usec)			-1.1511936E+01			Resid sbdelay (usec)			5.80910E-01			+/- 2.9E-03		
Phase delay (usec)	1.98074946917E+02			Apriori clockrate (us/s)			-2.9483610E-07			Resid phdelay (usec)			3.08570E-06			+/- 6.1E-07		
Delay rate (us/s)	-5.66267355478E-02			Apriori rate (us/s)			-5.66217540292E-02			Resid rate (us/s)			-4.98152E-06			+/- 5.9E-09		
Total phase (deg)	333.9			Apriori accel (us/s/s)			-4.80171642114E-06			Resid phase (deg)			95.7			+/- 19.0		

ph/seg (deg) 21.0 31.6 Search (1024X64) 0.159 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 40.3 55.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 72.2 38.1 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

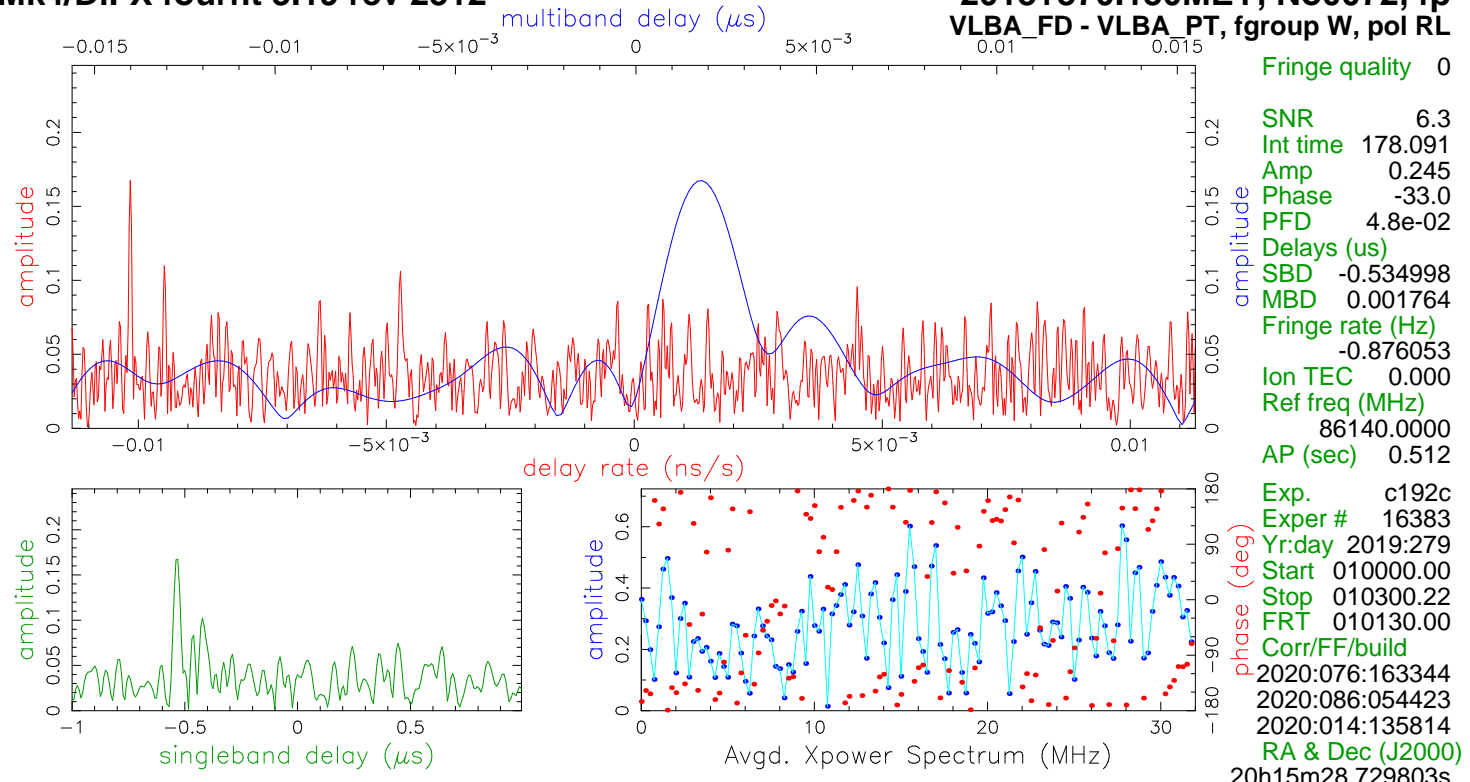
amp/frq (%) 63.8 66.4 Inc. frq. avg. 0.170 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

f: az 61.8 el 73.3 pa -107.2 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 403.000 -670.016 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/fp..130MEY Output file: /Exps/c192c/v2/1234/No0072/fp.W.146.130MEY

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, fp
VLBA_FD - VLBA_PT, fgroup W, pol RL



Fringe quality 0

SNR 6.3

Int time 178.091

Amp 0.245

Phase -33.0

PFD 4.8e-02

Delays (us)

SBD -0.534998

MBD 0.001764

Fringe rate (Hz)

-0.876053

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:279

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:076:163344

2020:086:054423

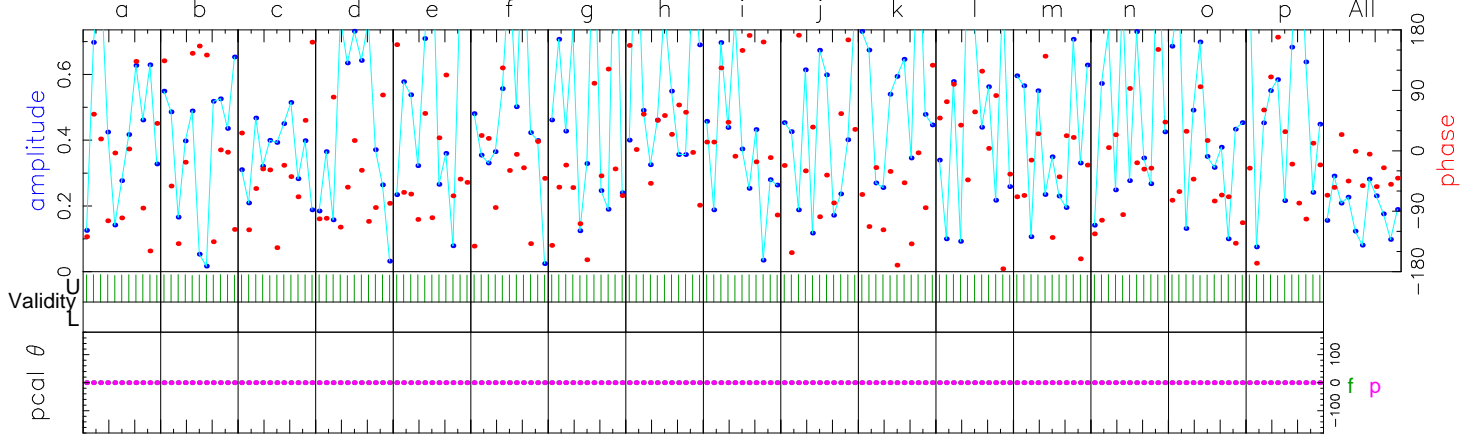
2020:014:135814

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					
	-2.4	-87.8	-38.3	-66.6	-55.4	-25.5	-42.8	20.4	28.0	-38.4	-69.2	53.0	-30.6	-29.8	-63.3	-37.4		Phase	-33.0				
	0.1	0.1	0.3	0.4	0.4	0.3	0.3	0.5	0.2	0.2	0.4	0.2	0.3	0.2	0.3	0.3		Ampl.	0.2				
	238.9	117.4	33.7	131.0	59.1	26.1	177.5	60.4	19.4	205.1	60.2	246.0	76.4	111.1	70.8	52.0		Sbd box	60.5				
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					
f	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					
fp	0:0	0:0	0:0	0:0	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					
fp	0:0	0:0	0:0	0:0	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					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
f	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)		1.97545457823E+02																Apriori delay (usec)	1.98074943831E+02	Resid mbdelay (usec)	1.76399E-03	+/-	1.7E-04
Sband delay (usec)		1.97539946331E+02																Apriori clock (usec)	-1.1511936E+01	Resid sbdelay (usec)	-5.34998E-01	+/-	2.7E-03
Phase delay (usec)		1.98074942766E+02																Apriori clockrate (us/s)	-2.9483610E-07	Resid phdelay (usec)	-1.06542E-06	+/-	5.9E-07
Delay rate (us/s)		-5.66319241409E-02																Apriori rate (us/s)	-5.66217540292E-02	Resid rate (us/s)	-1.01701E-05	+/-	5.7E-09
Total phase (deg)				205.1														Apriori accel (us/s/s)	-4.80171642114E-06	Resid phase (deg)	-33.0	+/-	18.3

ph/seg (deg) 26.9 30.3 Search (1024X64) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

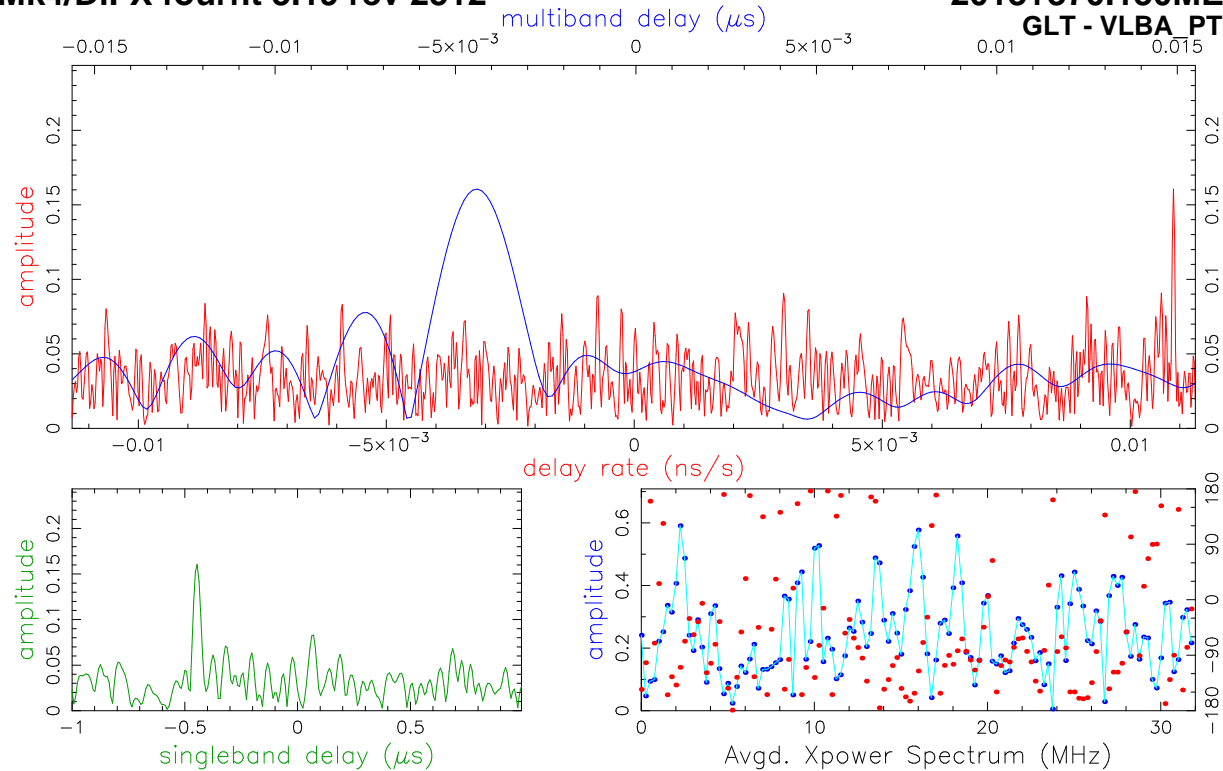
amp/seg (%) 39.6 52.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 39.6 36.6 Inc. seg. avg. 0.235 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 47.7 63.8 Inc. frq. avg. 0.242 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 61.8 el 73.3 pa -107.2 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 403.000 -670.016 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/fp..130MEY Output file: /Exps/c192c/v2/1234/No0072/fp.W.162.130MEY

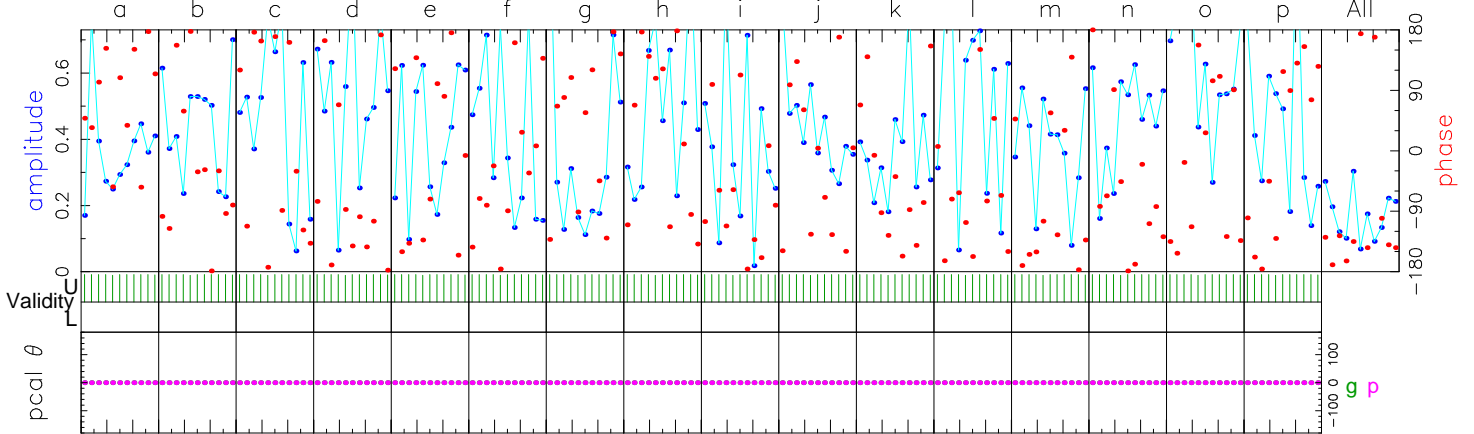


Fringe quality 0

SNR 5.9
Int time 179.251
Amp 0.244
Phase -143.1
PFD 3.7e-01
Delays (us)
SBD -0.446945
MBD -0.004440
Fringe rate (Hz) 0.937668
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054425
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



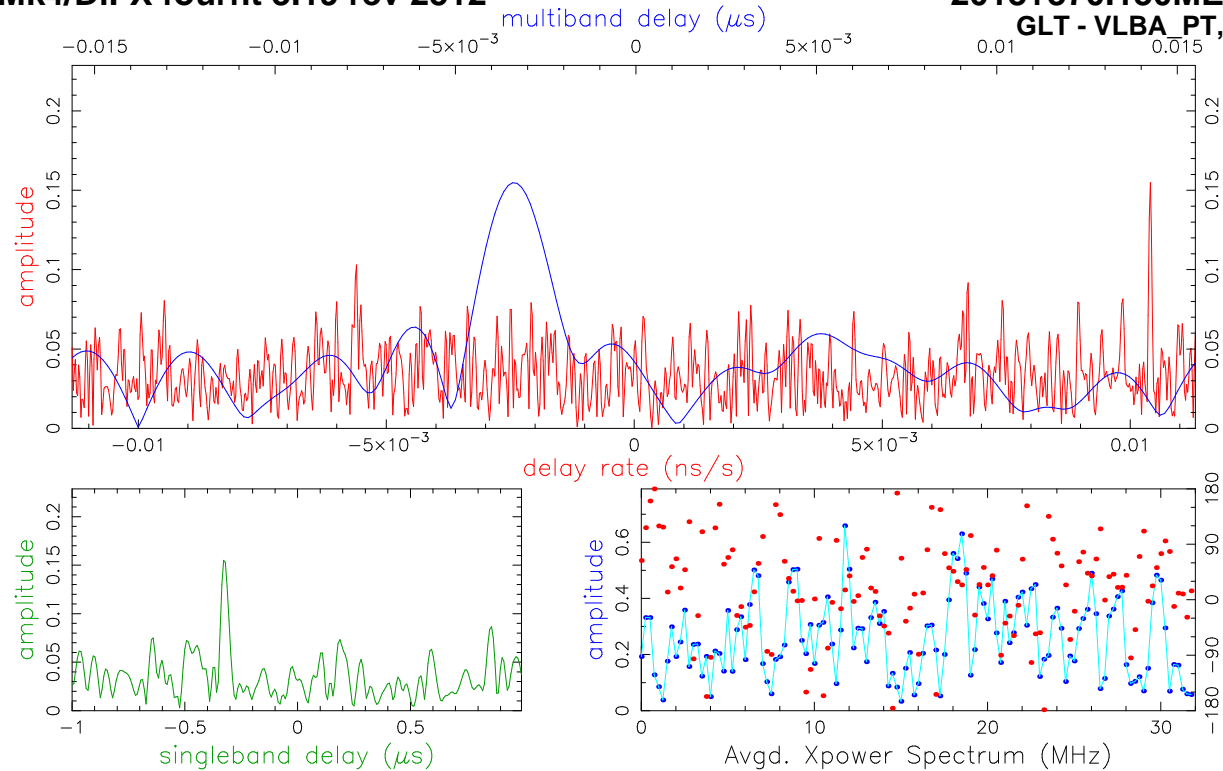
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
p	1000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

Group delay (usec)(sbd)	-3.92236634041E+03	Apriori delay (usec)	-3.92192440071E+03	Resid mbdelay (usec)	-4.43970E-03	+/-	1.8E-04
Sband delay (usec)	-3.92237134621E+03	Apriori clock (usec)	-1.0681056E+01	Resid sbdelay (usec)	-4.46945E-01	+/-	2.9E-03
Phase delay (usec)	-3.92192440533E+03	Apriori clockrate (us/s)	-1.2888659E-07	Resid phdelay (usec)	-4.61445E-06	+/-	6.3E-07
Delay rate (us/s)	-4.73685679954E-01	Apriori rate (us/s)	-4.73696565348E-01	Resid rate (us/s)	1.08854E-05	+/-	6.0E-09
Total phase (deg)	-99.0	Apriori accel (us/s/s)	4.87711249565E-05	Resid phase (deg)	-143.1	+/-	19.4

ph/seg (deg)	26.4	Theor.	Amplitude	0.244 +/- 0.041	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	45.6	32.2	Search (1024X64)	0.155	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.6	38.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016
amp/frq (%)	48.0	67.8	Inc. seg. avg.	0.225	Sample rate(MSamp/s):	64	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	0.243	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

g: az 200.8 el 50.0 pa 5.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 3450.600 5781.818 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/gp..130MEY Output file: /Exps/c192c/v2/1234/No0072/gp.W.168.130MEY

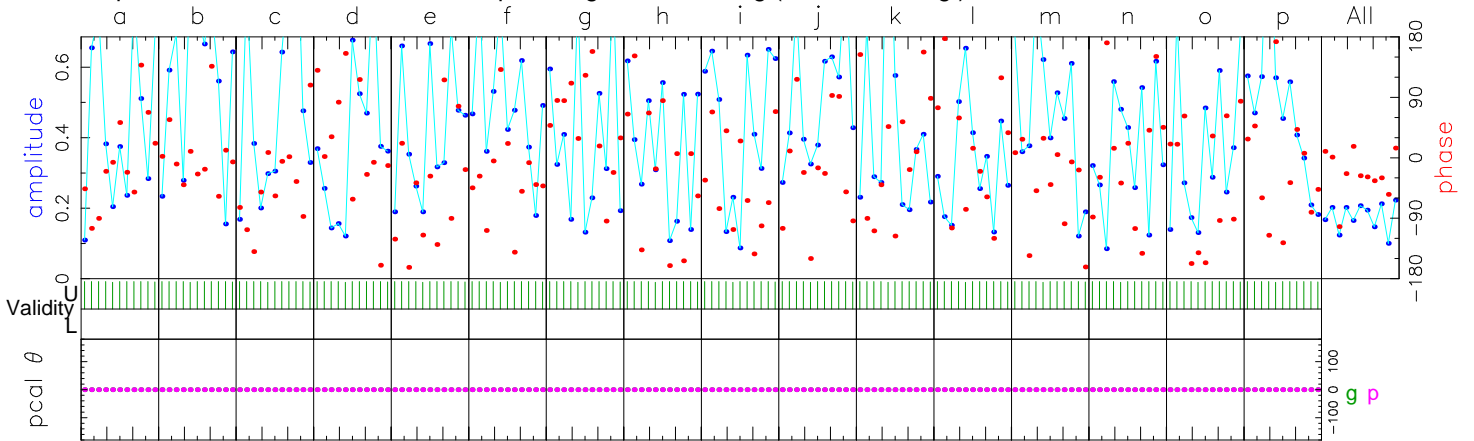


Fringe quality 0

SNR 5.8
Int time 179.191
Amp 0.229
Phase -18.1
PFD 6.6e-01
Delays (us)
SBD -0.324897
MBD -0.003369
Fringe rate (Hz) 0.896866
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

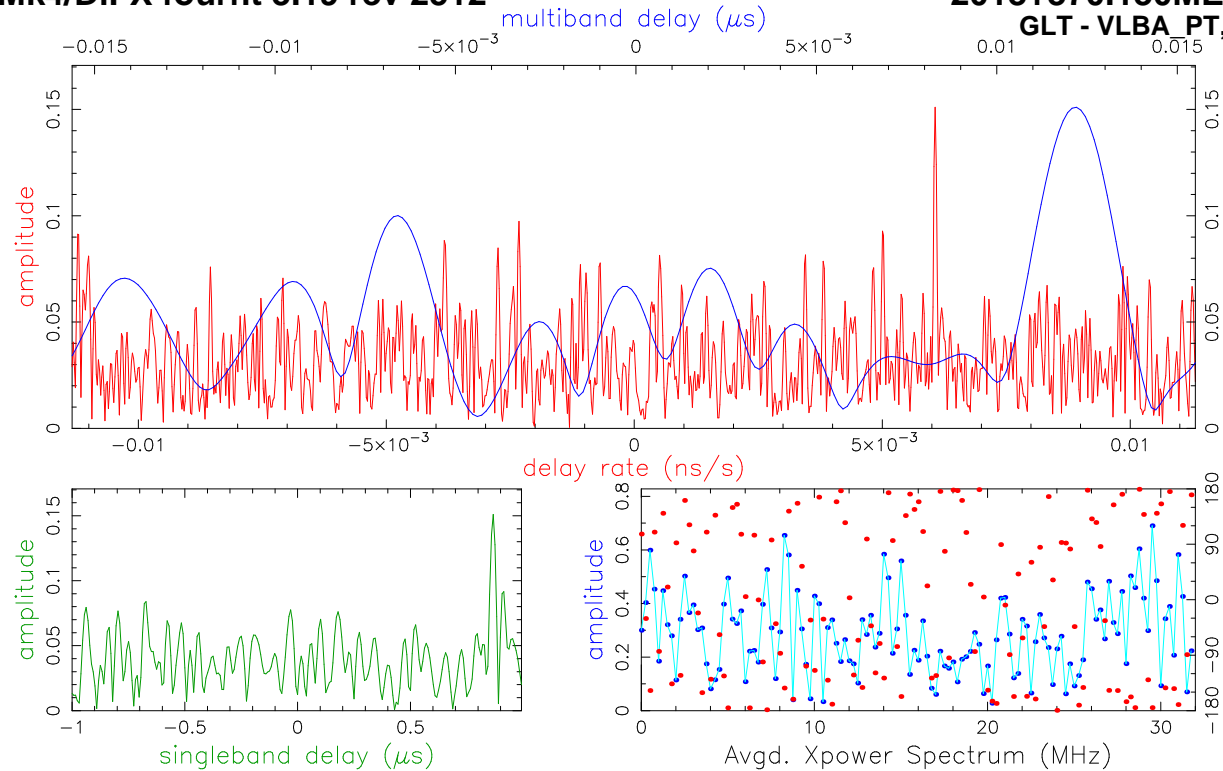
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054427
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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					
	-33.4	-1.7	-44.8	-2.3	-41.9	-35.7	34.3	72.0	-47.1	-2.1	-14.1	6.2	-19.7	-27.9	24.5	-56.3		Phase	-18.1				
	0.3	0.5	0.5	0.2	0.2	0.4	0.4	0.1	0.3	0.2	0.1	0.1	0.4	0.1	0.1	0.3		Ampl.	0.2				
	169.9	85.8	88.0	151.0	245.1	231.2	226.3	240.8	57.1	8.4	174.9	240.2	21.9	141.1	124.3	69.7		Sbd box	87.4				
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					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g: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					
g: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					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-3.92224026932E+03															Apriori delay (usec)	-3.92192440071E+03	Resid mbdelay (usec)	-3.36860E-03	+/-	1.9E-04
Sband delay (usec)			-3.92224929771E+03															Apriori clock (usec)	-1.0681056E+01	Resid sbdelay (usec)	-3.24897E-01	+/-	3.0E-03
Phase delay (usec)			-3.92192440130E+03															Apriori clockrate (us/s)	-1.2888659E-07	Resid phdelay (usec)	-5.82356E-07	+/-	6.4E-07
Delay rate (us/s)			-4.73686153623E-01															Apriori rate (us/s)	-4.73696565348E-01	Resid rate (us/s)	1.04117E-05	+/-	6.2E-09
Total phase (deg)					-333.9													Apriori accel (us/s/s)	4.87711249565E-05	Resid phase (deg)	-18.1	+/-	19.9

ph/seg (deg) 33.7 33.0 Search (1024X64) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 27.1 57.6 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 39.8 Inc. seg. avg. 0.221 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 60.9 69.5 Inc. frq. avg. 0.207 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 200.8 el 50.0 pa 5.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 3450.600 5781.818 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/gp..130MEY Output file: /Exps/c192c/v2/1234/No0072/gp.W.184.130MEY

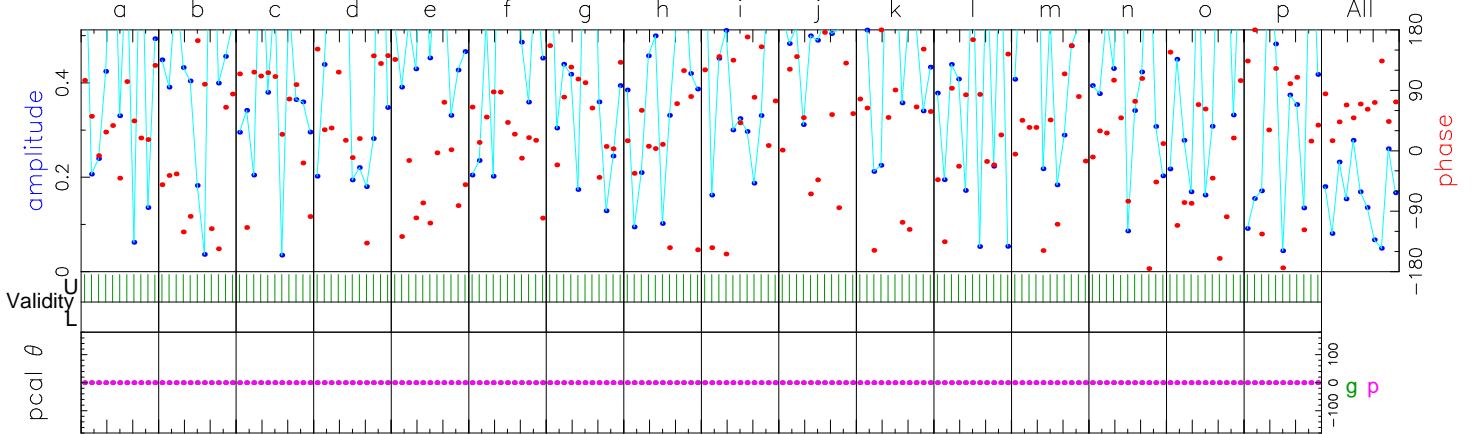


Fringe quality 0

SNR 5.5
Int time 179.251
Amp 0.171
Phase 59.2
PFD 9.8e-01
Delays (us)
SBD 0.866441
MBD 0.012164
Fringe rate (Hz) 0.523996
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054429
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
54.4	-85.3	104.7	80.4	-52.7	36.2	89.7	57.3	112.7	65.6	83.6	14.2	41.2	54.8	-134.6	64.4	Phase	59.2	
0.4	0.2	0.3	0.2	0.5	0.3	0.2	0.3	0.1	0.3	0.1	0.3	0.1	0.4	0.2	0.1	Ampl.	0.2	
239.7	252.0	203.4	201.7	173.1	167.5	199.1	8.8	61.7	27.2	238.4	72.3	205.1	14.2	120.0	235.6	Sbd box	239.9	
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g: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	
g: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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-3.92106848647E+03			Apriori delay (usec)			-3.92192440071E+03			Resid mbdelay (usec)			1.21642E-02			+/- 1.9E-04		
Sband delay (usec)	-3.92105795971E+03			Apriori clock (usec)			-1.0681056E+01			Resid sbdelay (usec)			8.66441E-01			+/- 3.1E-03		
Phase delay (usec)	-3.92192439880E+03			Apriori clockrate (us/s)			-1.2888659E-07			Resid phdelay (usec)			1.90871E-06			+/- 6.7E-07		
Delay rate (us/s)	-4.73690482274E-01			Apriori rate (us/s)			-4.73696565348E-01			Resid rate (us/s)			6.08307E-06			+/- 6.4E-09		
Total phase (deg)	-256.7			Apriori accel (us/s/s)			4.87711249565E-05			Resid phase (deg)			59.2			+/- 20.7		

ph/seg (deg) 29.1 34.3
amp/seg (%) 48.2 59.9
ph/frq (deg) 71.2 41.4
amp/frq (%) 71.6 72.2

RMS Theor. Amplitude 0.171 +/- 0.031
Search (1024X64) 0.147
Interp. 0.000
Inc. seg. avg. 0.154
Inc. frq. avg. 0.192

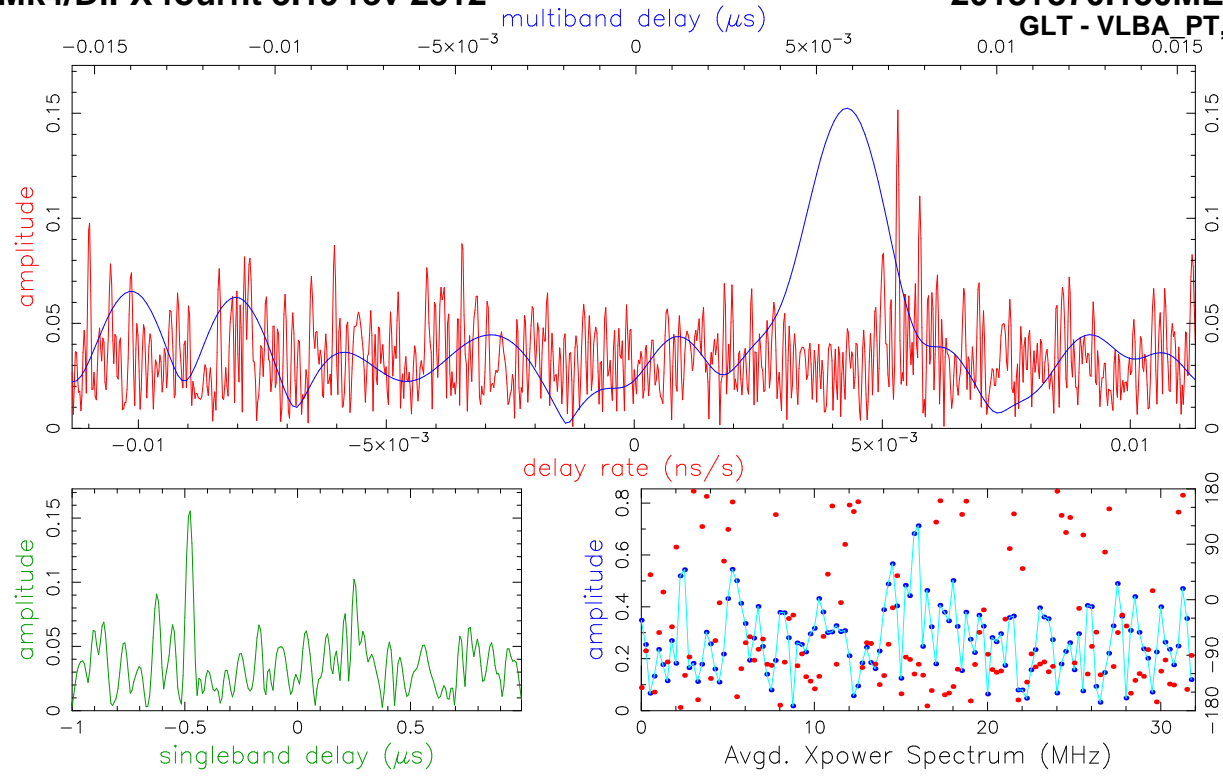
g: az 200.8 el 50.0 pa 5.8
p: az 74.3 el 71.3 pa -91.8
u,v (fr/asec) 3450.600 5781.818

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

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/gp..130MEY Output file: /Exps/c192c/v2/1234/No0072/gp.W.203.130MEY

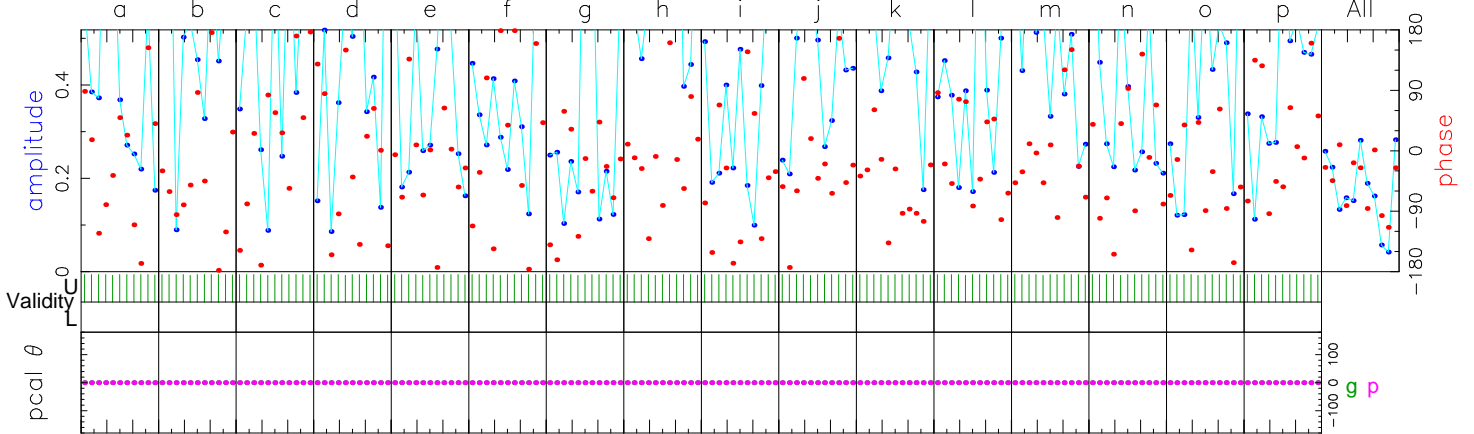


Fringe quality 0

SNR 5.8
Int time 179.191
Amp 0.173
Phase -35.7
PFD 6.3e-01
Delays (us)
SBD -0.479430
MBD 0.005709
Fringe rate (Hz) 0.458289
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

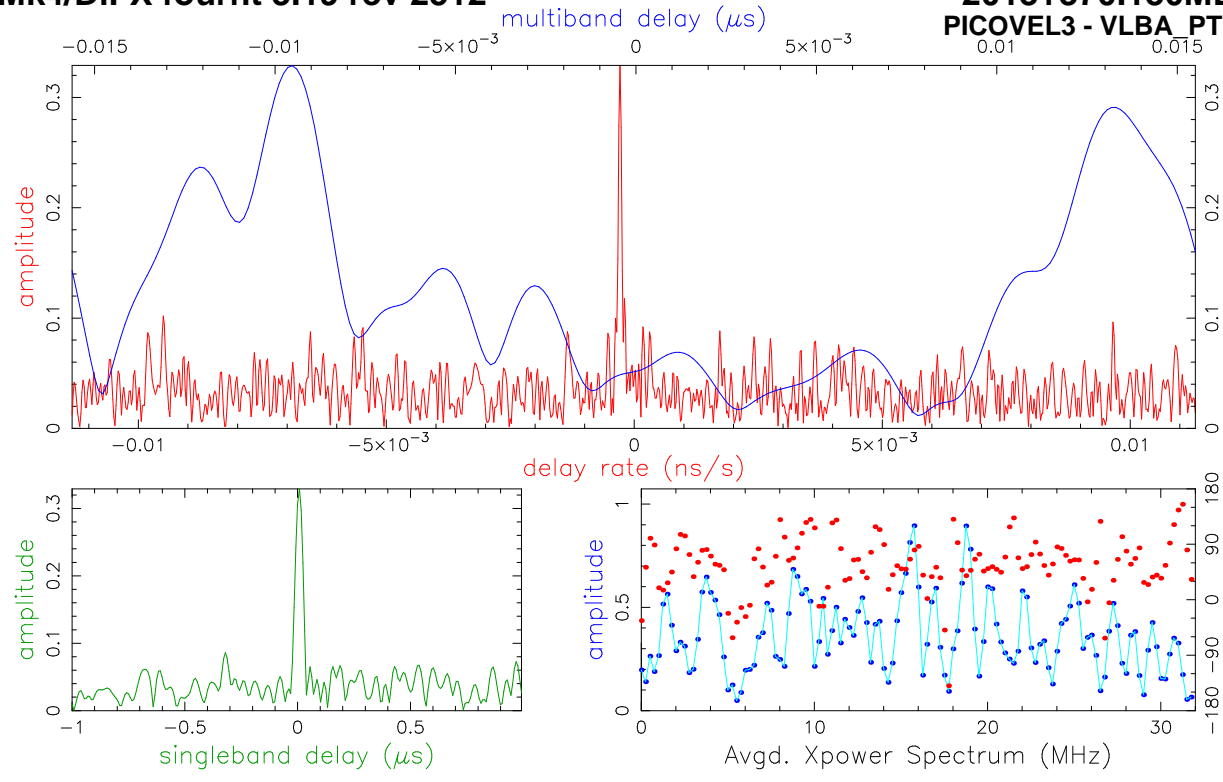
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054432
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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						
	-35.9	-69.9	26.8	-155.9	3.7	174.7	-33.2	-18.5	-73.7	-32.0	-50.5	-26.3	-29.2	15.7	-62.4	-4.2		Phase	-35.7					
	0.1	0.3	0.1	0.1	0.2	0.1	0.2	0.4	0.2	0.2	0.4	0.3	0.3	0.1	0.2	0.2		Ampl.	0.2					
	193.3	81.5	231.5	81.9	94.1	47.9	120.2	67.7	100.7	130.8	67.2	73.7	32.5	102.3	19.1	116.2		Sbd box	67.6					
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						
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs						
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs						
g: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						
g: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						
p	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						
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks						
																			Tracks					
Group delay (usec)(sbd)			-3.92241869136E+03																Apriori delay (usec)	-3.92192440071E+03	Resid mbdelay (usec)	5.70935E-03	+/-	1.9E-04
Sband delay (usec)			-3.92240383021E+03																Apriori clock (usec)	-1.0681056E+01	Resid sbdelay (usec)	-4.79430E-01	+/-	3.0E-03
Phase delay (usec)			-3.92192440186E+03																Apriori clockrate (us/s)	-1.2888659E-07	Resid phdelay (usec)	-1.15006E-06	+/-	6.4E-07
Delay rate (us/s)			-4.73691245066E-01																Apriori rate (us/s)	-4.73696565348E-01	Resid rate (us/s)	5.32028E-06	+/-	6.2E-09
Total phase (deg)																			Apriori accel (us/s/s)	4.87711249565E-05	Resid phase (deg)	-35.7	+/-	19.9

ph/seg (deg) 41.1 32.9 Amplitude 0.173 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.8 57.5 Search (1024X64) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 59.7 39.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 58.8 69.3 Inc. seg. avg. 0.166 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 200.8 el 50.0 pa 5.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 3450.600 5781.818 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/gp..130MEY Output file: /Exps/c192c/v2/1234/No0072/gp.W.225.130MEY simultaneous interpolator

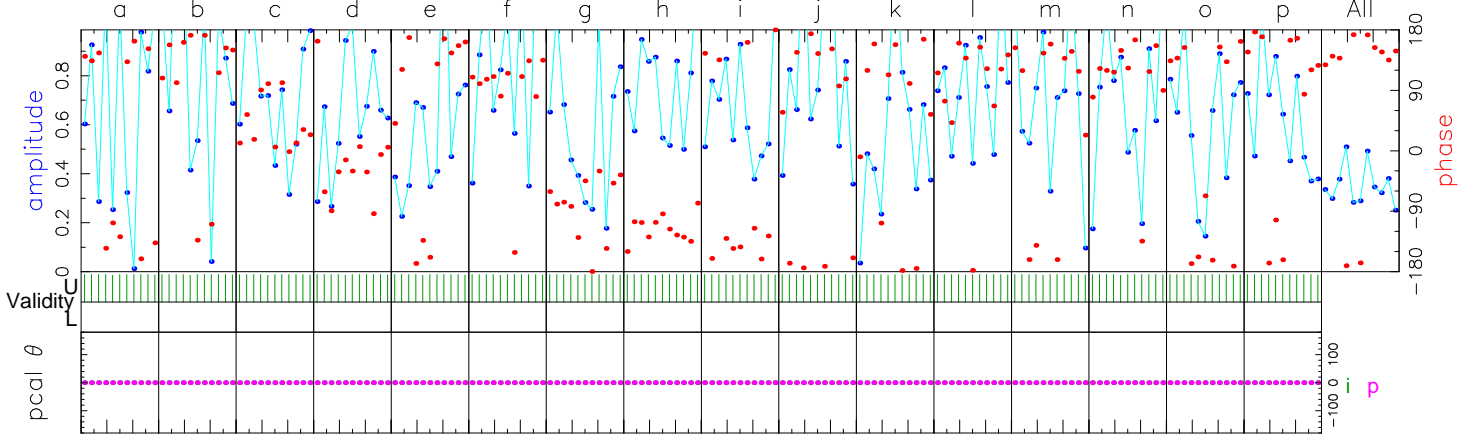


Fringe quality 9

SNR 12.1
 Int time 179.399
 Amp 0.329
 Phase 157.4
 PFD 4.8e-25
 Delays (us)
 SBD 0.007128
 MBD -0.009546
 Fringe rate (Hz)
 -0.025538
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054425
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

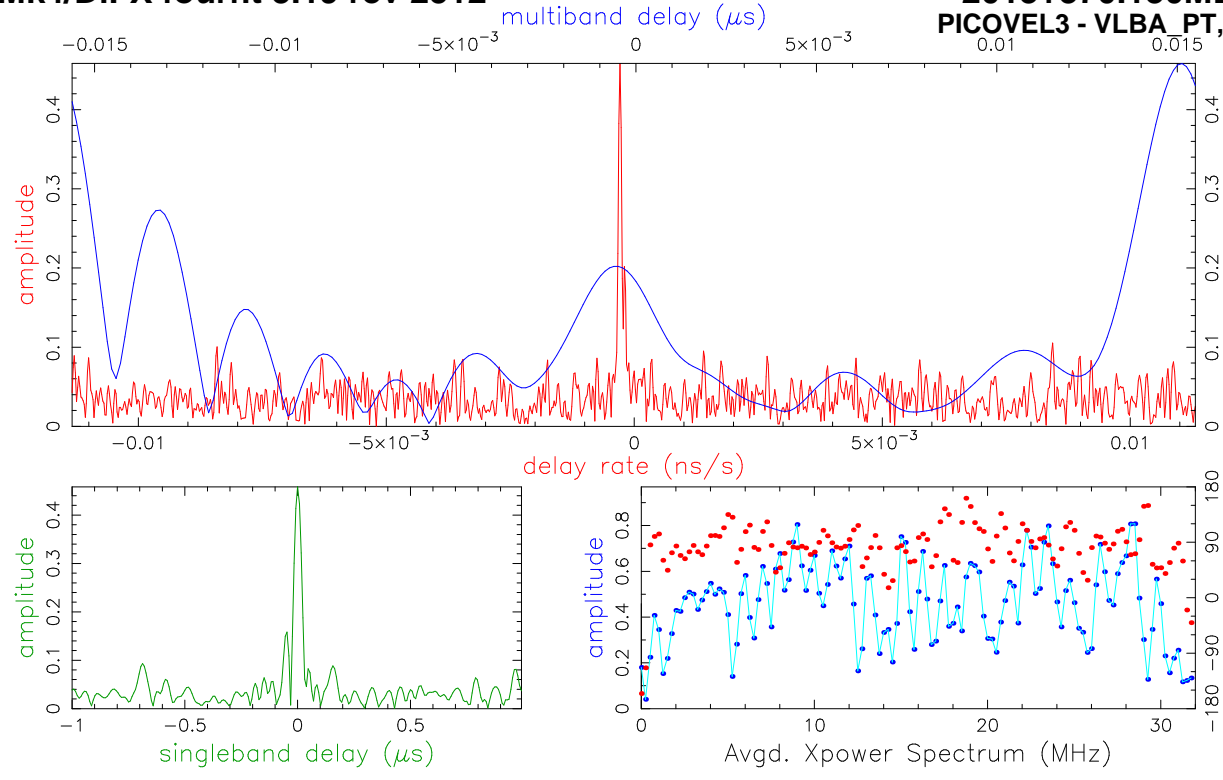
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	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		
i	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		
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
i	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		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

Group delay (usec)(sbd) -1.06576815501E+04 Apriori delay (usec) -1.06577032541E+04 Resid mbdelay (usec) -9.54608E-03 +/- 9.0E-05
 Sband delay (usec) -1.06576961266E+04 Apriori clock (usec) -1.2536068E+01 Resid sbdelay (usec) 7.12750E-03 +/- 1.4E-03
 Phase delay (usec) -1.06577032490E+04 Apriori clockrate (us/s) -5.5688657E-07 Resid phdelay (usec) 5.07476E-06 +/- 3.1E-07
 Delay rate (us/s) -1.36739805225E+00 Apriori rate (us/s) -1.36739775578E+00 Resid rate (us/s) -2.96475E-07 +/- 2.9E-09
 Total phase (deg) 47.5 Apriori accel (us/s/s) 5.92849734001E-05 Resid phase (deg) 157.4 +/- 9.5

ph/seg (deg) 21.3 15.8 Search (1024X64) 0.310 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 25.2 27.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 73.9 19.0 Inc. seg. avg. 0.341 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 83.5 33.2 Inc. frq. avg. 0.555 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 i: az 297.8 el 27.0 pa 62.6 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 9883.372 3759.272 ion window (TEC) 0.00 0.00 simultaneous interpolator

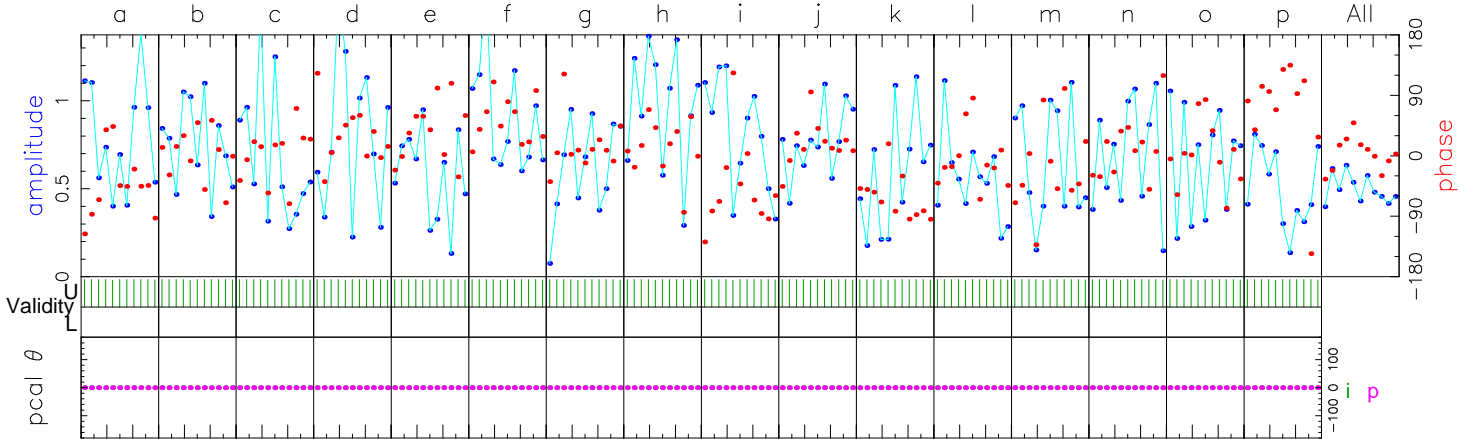


Fringe quality 8

SNR 16.8
 Int time 179.399
 Amp 0.458
 Phase 3.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.000396
 MBD 0.015115
 Fringe rate (Hz)
 -0.025114
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

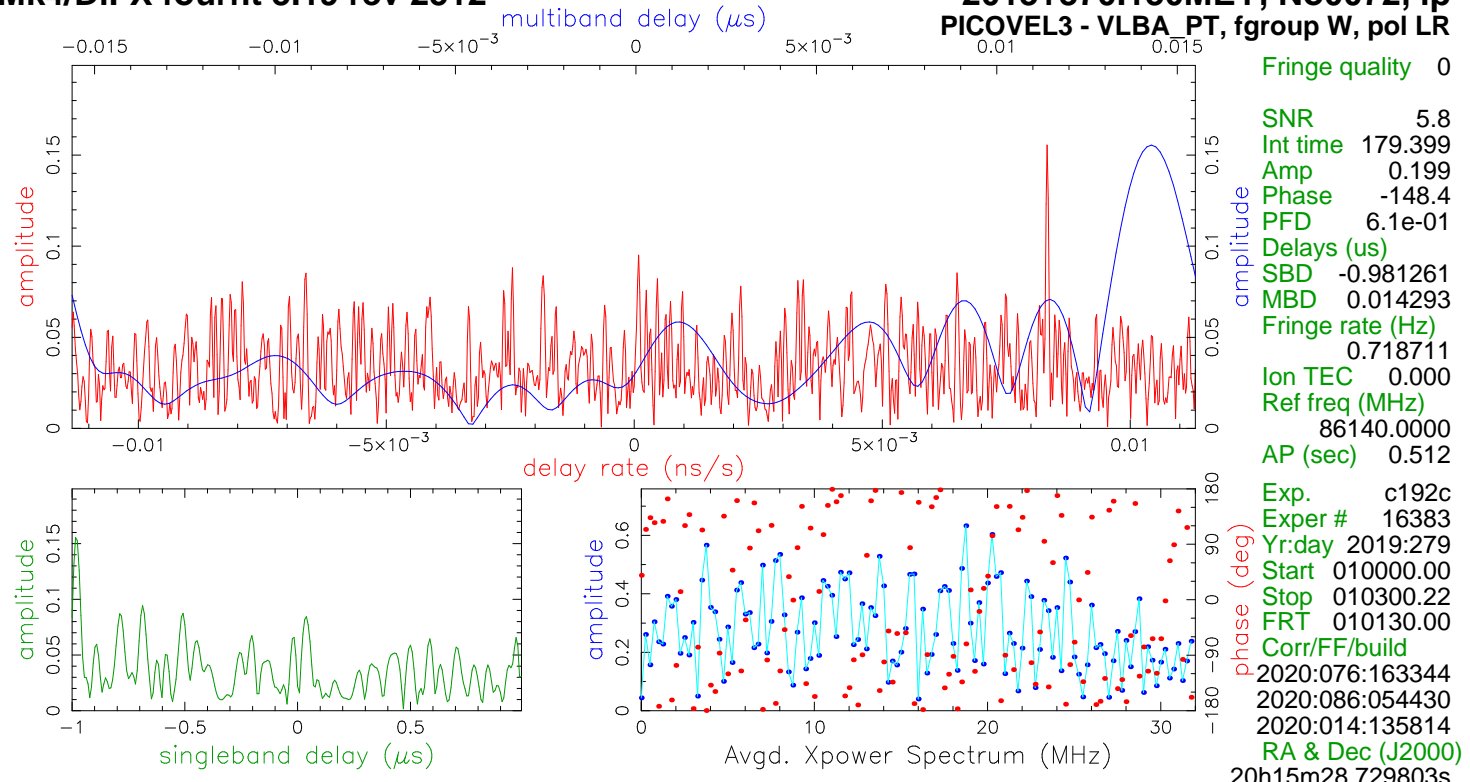
Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054428
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

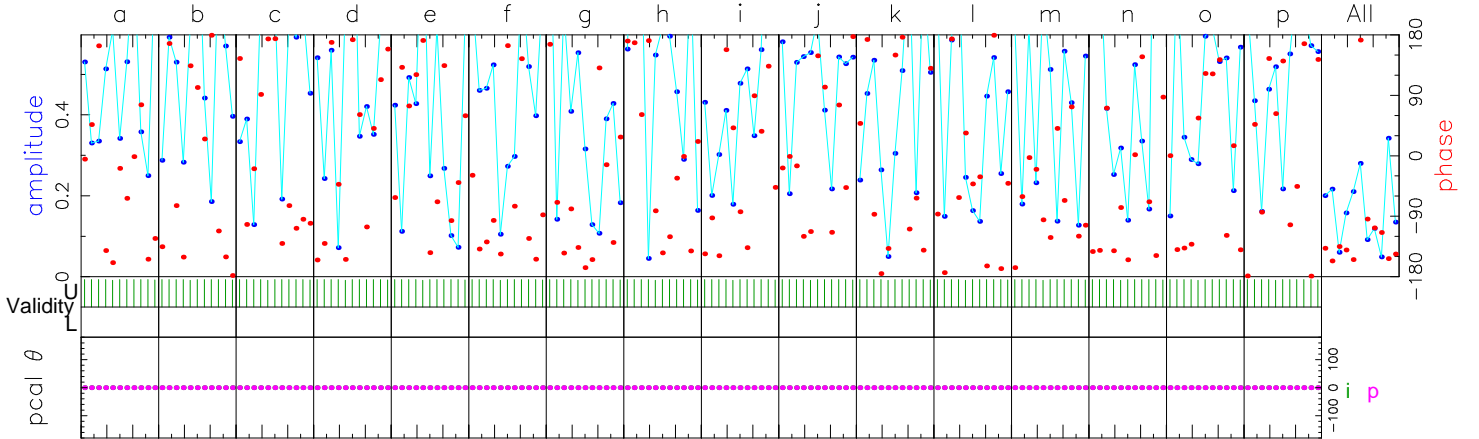


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
i	1000	1000	1000	1000	1000	1000	1000	1000	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		
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
i	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		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-1.06576881389E+04															
Sband delay (usec)			-1.06577028576E+04															
Phase delay (usec)			-1.06577032540E+04															
Delay rate (us/s)			-1.36739804732E+00															
Total phase (deg)																		
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
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																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
pcal θ																		

ph/seg (deg) 23.7 11.3 Search (1024X64) 0.454 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.0 19.8 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.7 13.7 Inc. seg. avg. 0.490 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 36.9 23.8 Inc. frq. avg. 0.561 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 i: az 297.8 el 27.0 pa 62.6 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 9883.372 3759.272 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/ip..130MEY Output file: /Exps/c192c/v2/1234/No0072/ip.W.194.130MEY

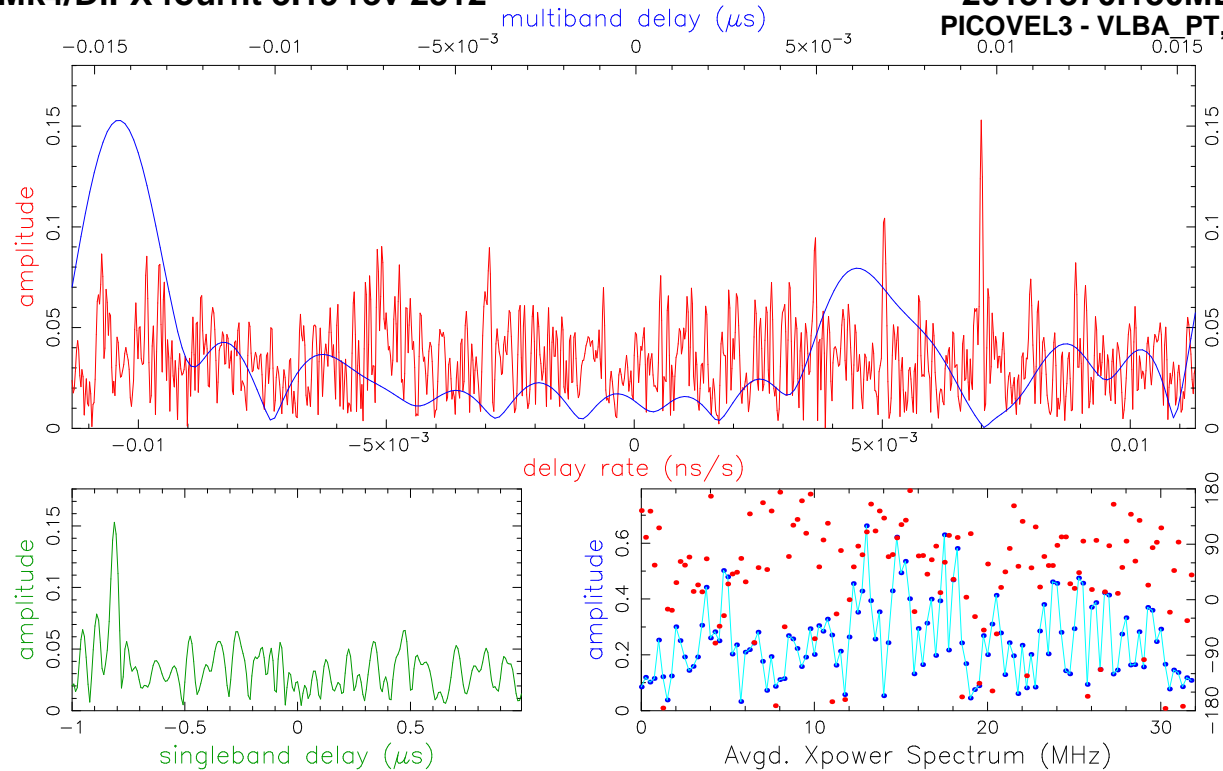


Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	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				
	-76.9	-177.1	-134.1	172.4	140.2	-120.7	-144.2	-148.2	-157.7	-87.6	-153.3	-111.6	-83.2	-154.3	-175.7	167.9	Phase	-148.4				
	0.1	0.3	0.3	0.4	0.1	0.4	0.3	0.2	0.1	0.1	0.3	0.2	0.3	0.3	0.2	0.2	Ampl.	0.2				
	29.7	94.1	46.6	28.3	159.3	2.3	6.2	177.0	18.1	54.4	160.0	127.8	131.2	20.6	186.9	180.0	Sbd box	3.4				
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					
i	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 freqs					
ip	0:0	0:0	0:0	0:0	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					
ip	0:0	0:0	0:0	0:0	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					
i	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						
i	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					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.06586889613E+04														Apriori delay (usec)	-1.06577032541E+04	Resid mbdelay (usec)	1.42928E-02	+/-	1.9E-04
Sband delay (usec)			-1.06586845151E+04														Apriori clock (usec)	-1.2536068E+01	Resid sbdelay (usec)	-9.81261E-01	+/-	3.0E-03
Phase delay (usec)			-1.06577032589E+04														Apriori clockrate (us/s)	-5.5688657E-07	Resid phdelay (usec)	-4.78417E-06	+/-	6.4E-07
Delay rate (us/s)			-1.36738941225E+00														Apriori rate (us/s)	-1.36739775578E+00	Resid rate (us/s)	8.34353E-06	+/-	6.1E-09
Total phase (deg)					-258.3												Apriori accel (us/s/s)	5.92849734001E-05	Resid phase (deg)	-148.4	+/-	19.8

ph/seg (deg) 26.8 32.9 Amplitude 0.199 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 55.7 57.4 Search (1024X64) 0.152 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.8 39.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.4 69.2 Inc. seg. avg. 0.184 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 i: az 297.8 el 27.0 pa 62.6 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 9883.372 3759.272 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/ip..130MEY Output file: /Exps/c192c/v2/1234/No0072/ip.W.211.130MEY simultaneous interpolator

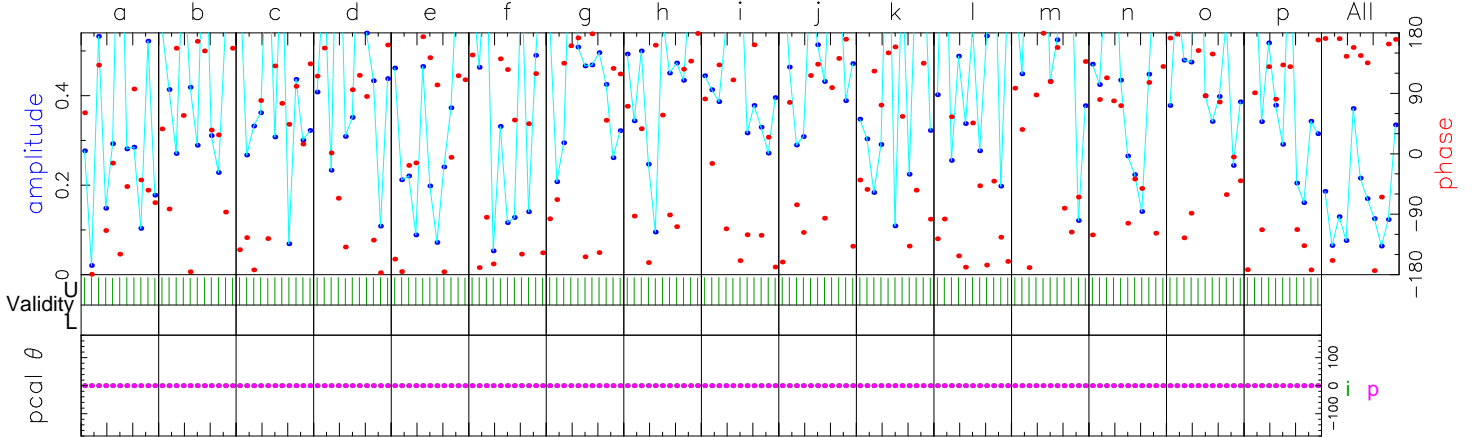


Fringe quality 0

SNR 5.6
 Int time 179.399
 Amp 0.180
 Phase 164.0
 PFD 9.2e-01
 Delays (us)
 SBD -0.811544
 MBD -0.014338
 Fringe rate (Hz) 0.603458
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

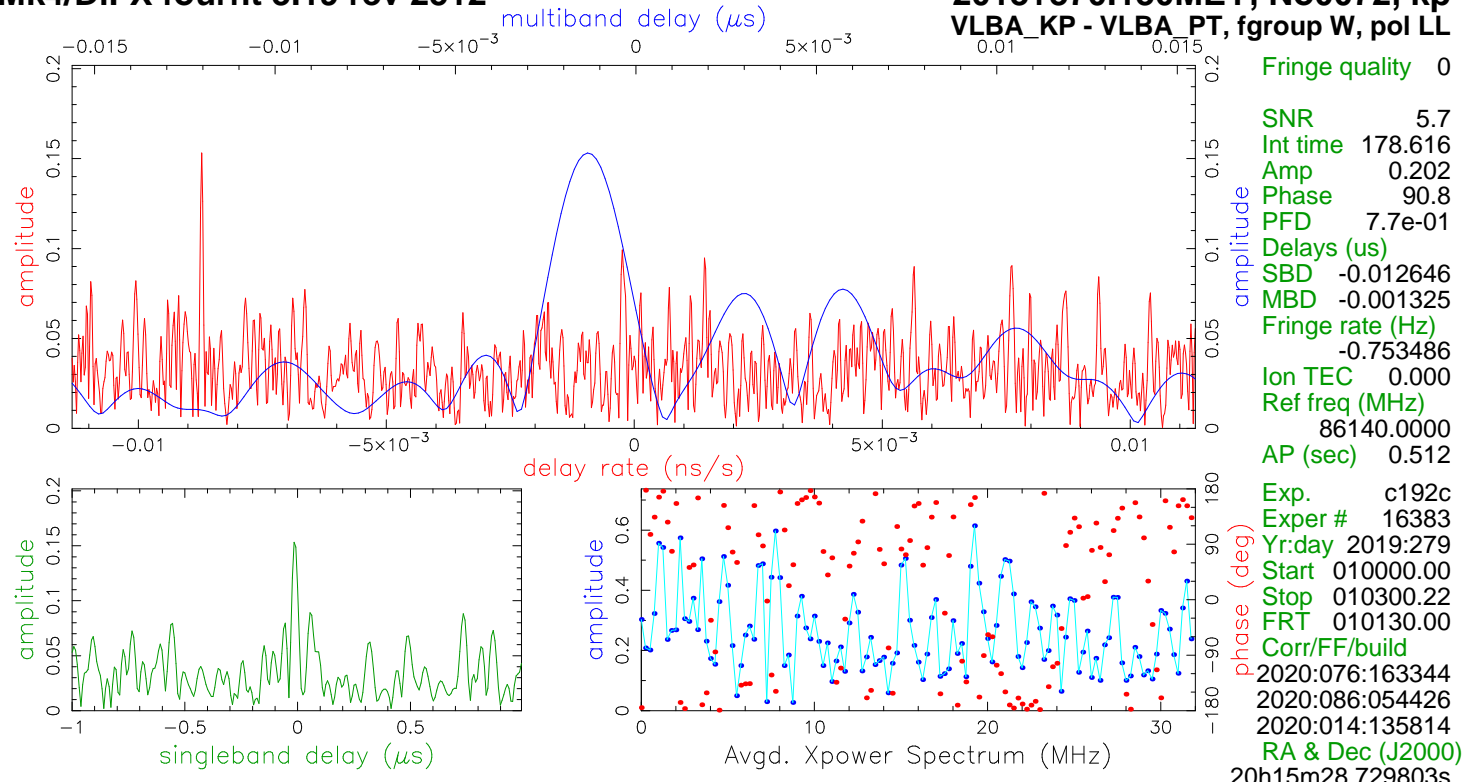
Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054432
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-114.0	132.3	150.4	147.7	137.3	-173.5	177.1	147.7	-178.7	158.0	125.6	-113.0	167.9	117.3	-174.1	146.9	Phase	164.0
	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.1	0.3	0.3	0.2	0.2	0.3	Ampl.	0.2
	77.7	203.9	135.1	19.9	95.4	238.2	144.2	202.1	116.6	119.8	50.3	147.1	228.7	154.3	198.6	91.8	Sbd box	25.1
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	
i	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	
ip	0:0	0:0	0:0	0:0	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	
i	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		
i	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-1.06585300917E+04		Apriori delay (usec)		-1.06577032541E+04		Resid mbdelay (usec)		-1.43376E-02		+/-		1.9E-04					
Sband delay (usec)	-1.06585147986E+04		Apriori clock (usec)		-1.2536068E+01		Resid sbdelay (usec)		-8.11544E-01		+/-		3.1E-03					
Phase delay (usec)	-1.06577032488E+04		Apriori clockrate (us/s)		-5.5688657E-07		Resid phdelay (usec)		5.28995E-06		+/-		6.6E-07					
Delay rate (us/s)	-1.36739075022E+00		Apriori rate (us/s)		-1.36739775578E+00		Resid rate (us/s)		7.00555E-06		+/-		6.3E-09					
Total phase (deg)	54.2		Apriori accel (us/s/s)		5.92849734001E-05		Resid phase (deg)		164.0		+/-		20.4					

ph/seg (deg) 43.6 33.9 Search (1024X64) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.7 59.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.2 40.9 Inc. seg. avg. 0.169 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 46.6 71.3 Inc. frq. avg. 0.169 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 i: az 297.8 el 27.0 pa 62.6 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 9883.372 3759.272 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/ip..130MEY Output file: /Exps/c192c/v2/1234/No0072/ip.W.227.130MEY



Fringe quality 0

SNR 5.7

Int time 178.616

Amp 0.202

Phase 90.8

PFD 7.7e-01

Delays (us)

SBD -0.012646

MBD -0.001325

Fringe rate (Hz)

-0.753486

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:279

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:076:163344

2020:086:054426

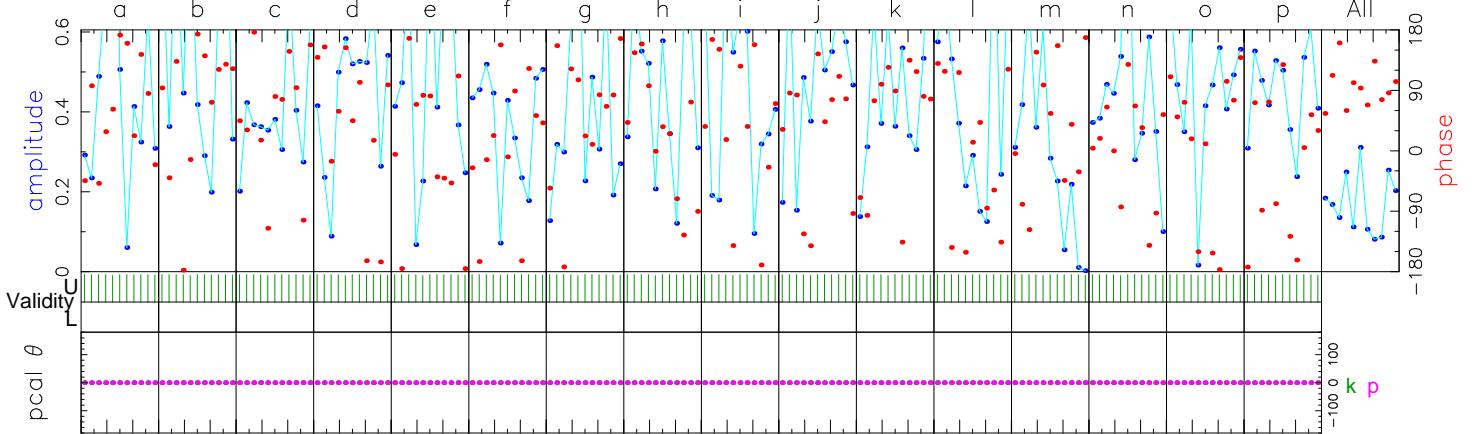
2020:014:135814

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

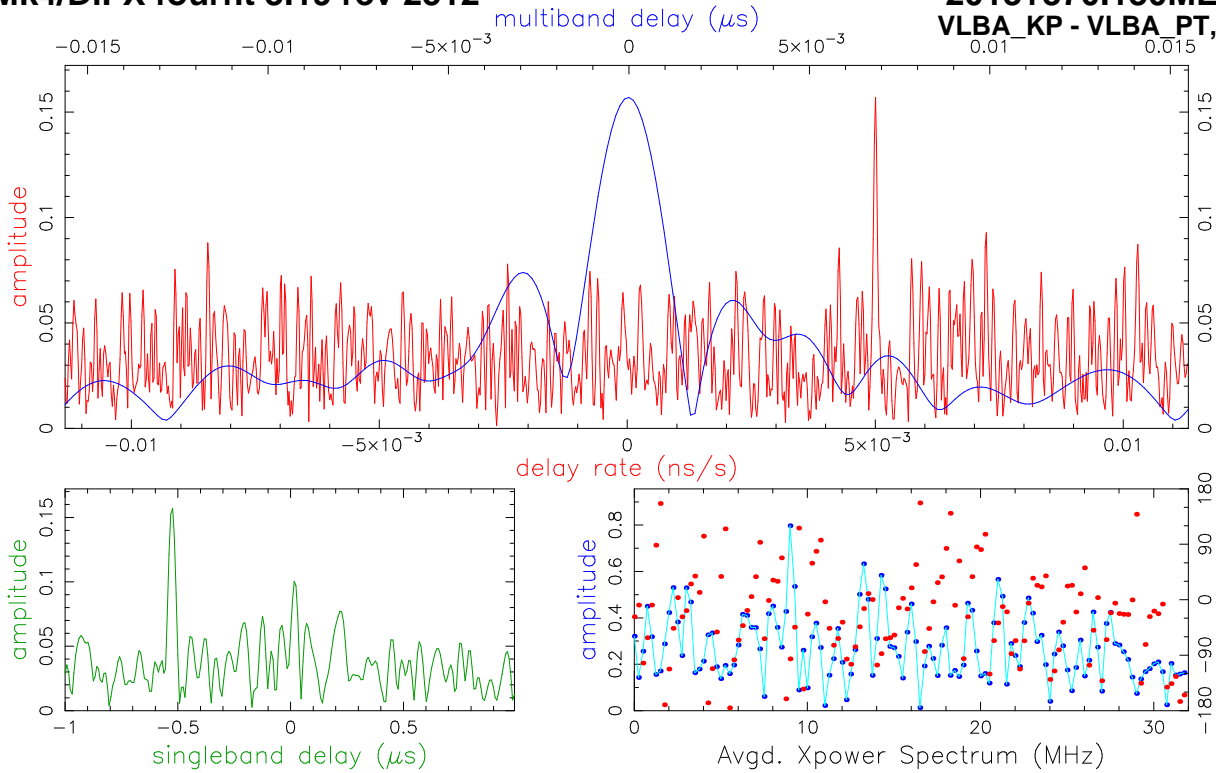


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
53.2	118.6	116.4	104.0	35.5	27.8	96.4	93.0	63.6	102.0	102.9	148.8	132.3	43.3	94.1	49.0	Phase	90.8	
0.3	0.4	0.2	0.3	0.1	0.2	0.3	0.2	0.2	0.3	0.4	0.2	0.0	0.1	0.3	0.1	Ampl.	0.2	
4.2	152.1	51.9	183.0	230.9	219.4	246.6	226.0	220.1	89.9	128.6	85.9	60.5	39.9	201.3	59.0	Sbd box	127.4	
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	
k	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 freqs	
k: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	
kp	0:0	0:0	0:0	0:0	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	
p	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	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-4.63246707105E+02			Apriori delay (usec)			-4.63245382274E+02			Resid mbdelay (usec)			-1.32483E-03			+/- 1.9E-04		
Sband delay (usec)	-4.63258028274E+02			Apriori clock (usec)			-1.2385958E+01			Resid sbdelay (usec)			-1.26460E-02			+/- 3.0E-03		
Phase delay (usec)	-4.63245379345E+02			Apriori clockrate (us/s)			-3.9846558E-07			Resid phdelay (usec)			2.92887E-06			+/- 6.5E-07		
Delay rate (us/s)	6.88070777530E-02			Apriori rate (us/s)			6.88158249818E-02			Resid rate (us/s)			-8.74723E-06			+/- 6.2E-09		
Total phase (deg)	8.3			Apriori accel (us/s/s)			5.61190259530E-08			Resid phase (deg)			90.8			+/- 20.1		

	RMS	Theor.	Amplitude	0.202 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	30.7	33.3	Search (1024X64)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	47.8	58.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	38.0	40.2	Inc. seg. avg.	0.191	Sample rate(MISamp/s): 64	dr window (ns/s) -0.016 0.016
amp/frq (%)	57.5	70.2	Inc. frq. avg.	0.183	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

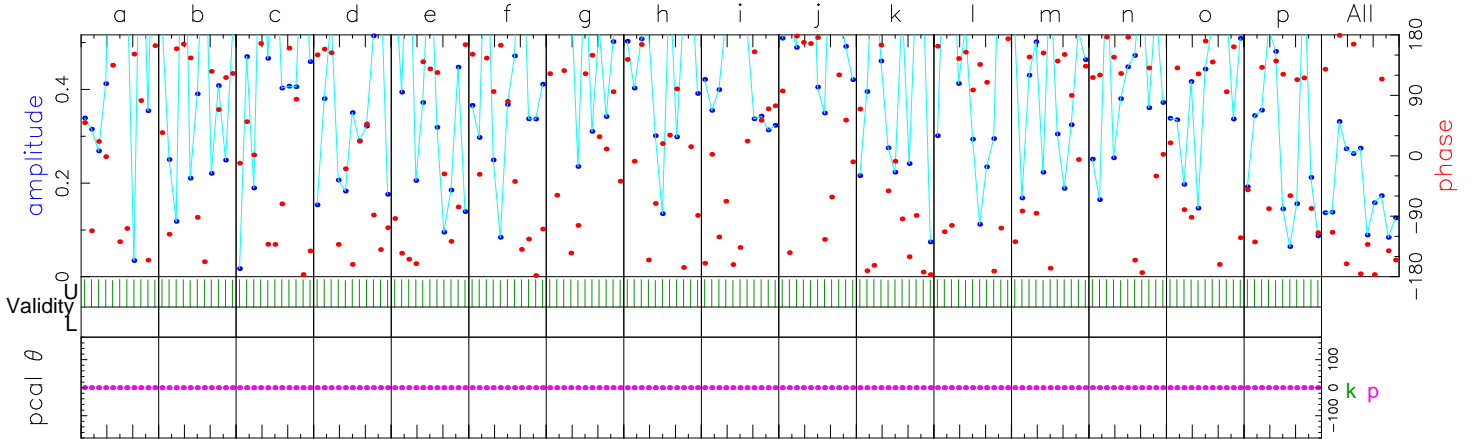
k: az 68.9 el 67.8 pa -95.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -495.535 -235.552 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/kp..130MEY Output file: /Exps/c192c/v2/1234/No0072/kp.W.180.130MEY



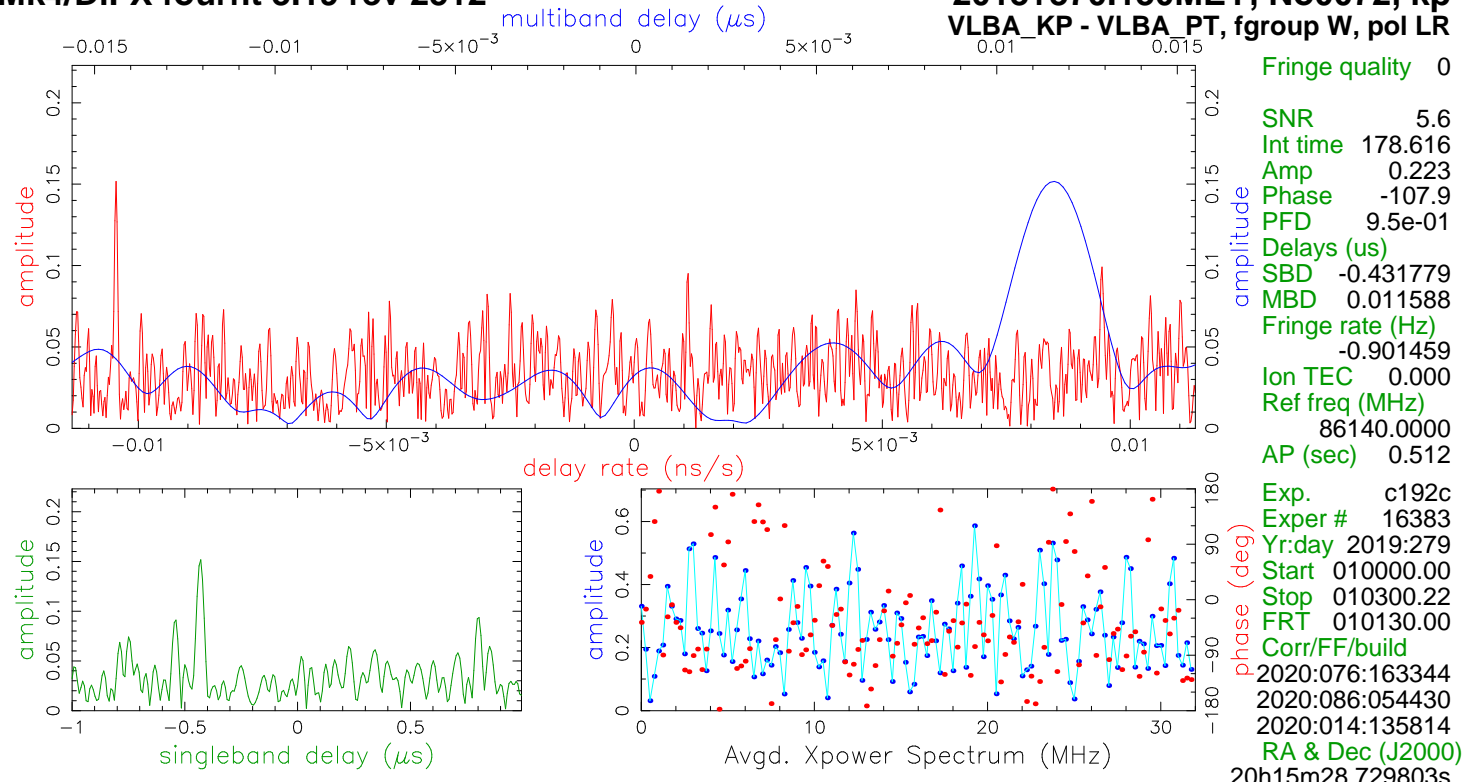
Fringe quality 0
SNR 5.8
Int time 178.616
Amp 0.172
Phase -177.1
PFD 5.7e-01
Delays (us)
SBD -0.526124
MBD -0.000038
Fringe rate (Hz) 0.431694
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054428
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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
kp	0:0	0:0	0:0	0:0	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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-4.63776670241E+02															
Sband delay (usec)			-4.63771505774E+02															
Phase delay (usec)			-4.63245387986E+02															
Delay rate (us/s)			6.88208365248E-02															
Total phase (deg)				-259.6														
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																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 38.3 32.8 Search (1024X64) 0.153 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 53.7 57.2 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 31.6 39.5 Inc. seg. avg. 0.173 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 45.8 69.0 Inc. frq. avg. 0.151 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 68.9 el 67.8 pa -95.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -495.535 -235.552 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/kp..130MEY Output file: /Exps/c192c/v2/1234/No0072/kp.W.197.130MEY



Fringe quality 0

SNR 5.6

Int time 178.616

Amp 0.223

Phase -107.9

PFD 9.5e-01

Delays (us)

SBD -0.431779

MBD 0.011588

Fringe rate (Hz)

-0.901459

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:279

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:076:163344

2020:086:054430

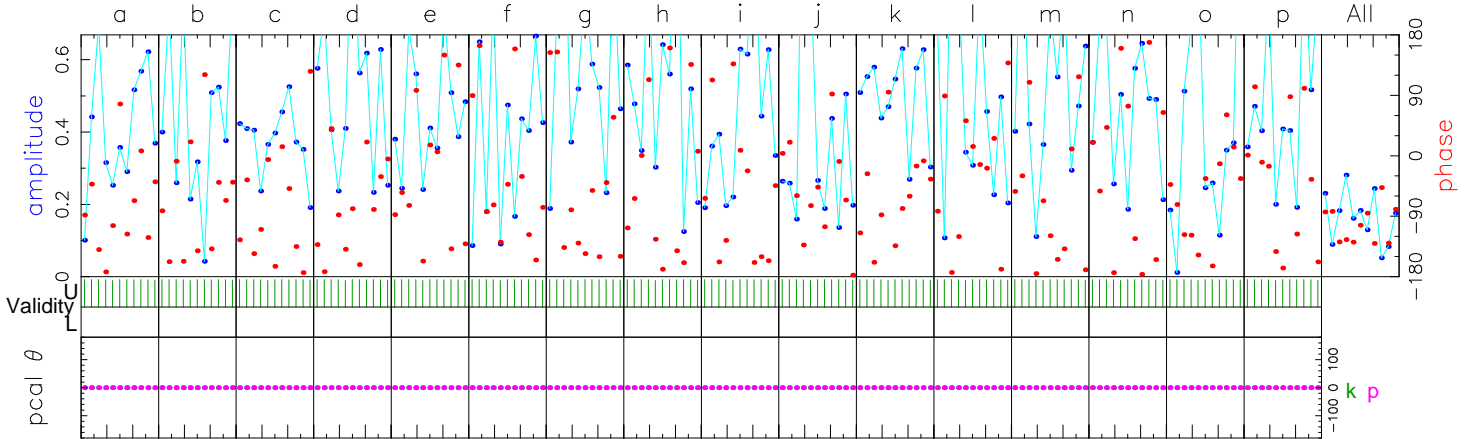
2020:014:135814

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				
	-87.1	-98.6	-100.1	-90.7	-139.0	-103.5	-140.9	-162.9	-133.4	-85.0	-68.2	-91.6	-116.6	-176.0	-79.7	55.8	Phase	-107.9				
	0.3	0.4	0.2	0.3	0.1	0.3	0.4	0.4	0.2	0.3	0.4	0.2	0.3	0.2	0.3	0.1	Ampl.	0.2				
	235.7	66.7	141.8	59.9	101.4	135.1	225.4	104.0	100.8	3.2	33.9	236.4	139.9	119.5	31.7	133.2	Sbd box	73.7				
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					
k	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					
k: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					
kp	0:0	0:0	0:0	0:0	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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
k	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)			-4.63671293790E+02														Apriori delay (usec)	-4.63245382274E+02	Resid mbdelay (usec)	1.15885E-02	+/-	1.9E-04
Sband delay (usec)			-4.63677161274E+02														Apriori clock (usec)	-1.2385958E+01	Resid sbdelay (usec)	-4.31779E-01	+/-	3.1E-03
Phase delay (usec)			-4.63245385753E+02														Apriori clockrate (us/s)	-3.9846558E-07	Resid phdelay (usec)	-3.47855E-06	+/-	6.6E-07
Delay rate (us/s)			6.88053599400E-02														Apriori rate (us/s)	6.88158249818E-02	Resid rate (us/s)	-1.04650E-05	+/-	6.4E-09
Total phase (deg)					-190.4												Apriori accel (us/s/s)	5.61190259530E-08	Resid phase (deg)	-107.9	+/-	20.5

RMS 27.6 Theor. 34.1 Amplitude 0.223 +/- 0.040 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 45.4 59.4 Interp. 0.146 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

amp/seg (%) 54.3 41.1 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 44.6 71.7 Inc. frq. avg. 0.215 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

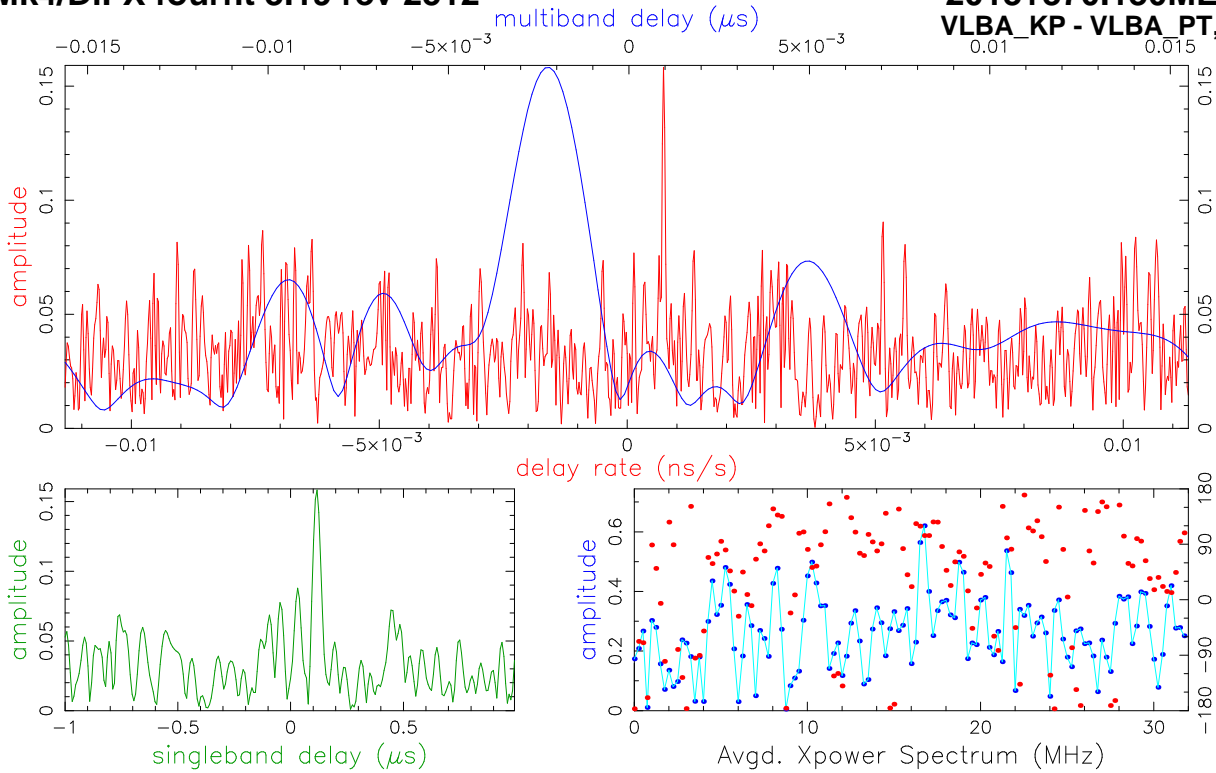
amp/frq (%) 44.6 71.7 Inc. frq. avg. 0.215 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 68.9 el 67.8 pa -95.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -495.535 -235.552 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/kp..130MEY Output file: /Exps/c192c/v2/1234/No0072/kp.W.213.130MEY

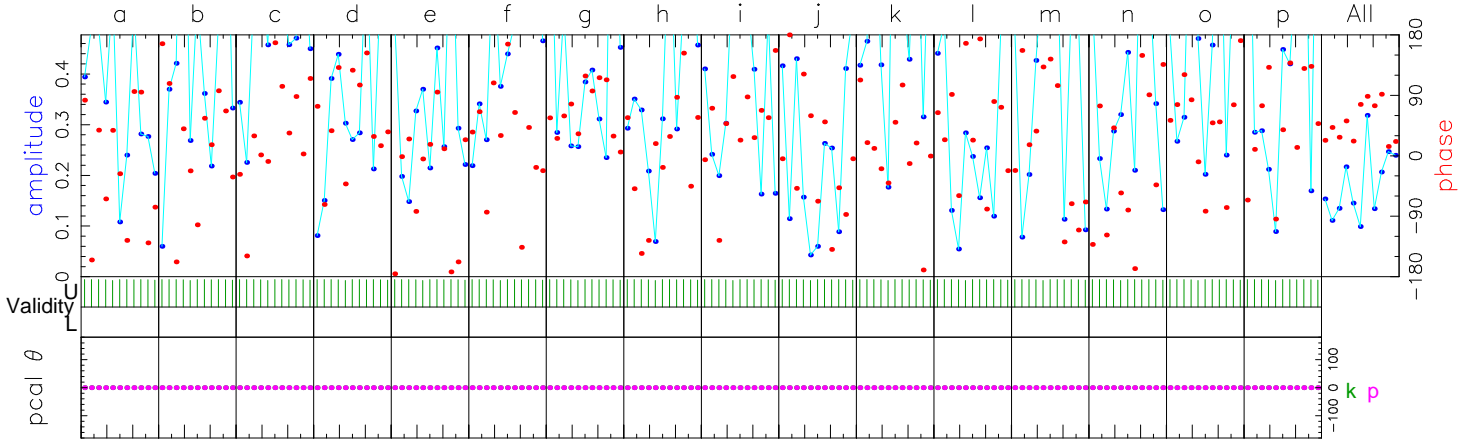
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, kp
VLBA_KP - VLBA_PT, fgroup W, pol RL



Fringe quality 0
SNR 5.8
Int time 178.616
Amp 0.159
Phase 49.4
PFD 5.6e-01
Delays (us)
SBD 0.115489
MBD -0.002276
Fringe rate (Hz) 0.063170
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054433
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

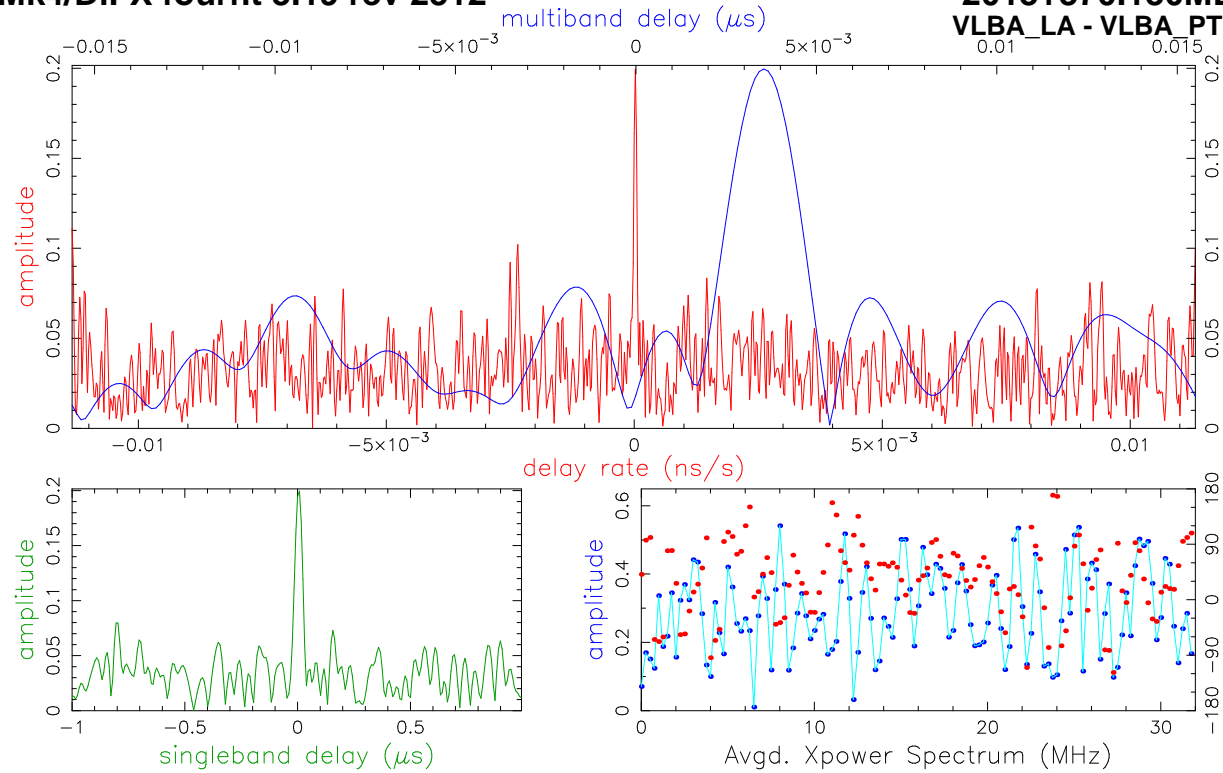


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k: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		
k	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		
k	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)	-4.63122658417E+02	Apriori delay (usec)	-4.63245382274E+02	Resid mbdelay (usec)	-2.27614E-03	+/-	1.9E-04
Sband delay (usec)	-4.63129892774E+02	Apriori clock (usec)	-1.2385958E+01	Resid sbdelay (usec)	1.15489E-01	+/-	3.0E-03
Phase delay (usec)	-4.63245380681E+02	Apriori clockrate (us/s)	-3.9846558E-07	Resid phdelay (usec)	1.59356E-06	+/-	6.4E-07
Delay rate (us/s)	6.88165583276E-02	Apriori rate (us/s)	6.88158249818E-02	Resid rate (us/s)	7.33346E-07	+/-	6.1E-09
Total phase (deg)	-33.1	Apriori accel (us/s/s)	5.61190259530E-08	Resid phase (deg)	49.4	+/-	19.7

ph/seg (deg)	28.1	Theor.	32.7	Amplitude	0.159 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	43.6	Search (1024X64)	0.155	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	54.7	Inc. seg. avg.	0.157	Inc. frq. avg.	0.147	Bits/sample: 2x2	mb window (us)	-0.016 0.016
amp/frq (%)	68.4	Inc. frq. avg.	0.147			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
						nlags: 128	t_cohere infinite	

k: az 68.9 el 67.8 pa -95.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -495.535 -235.552 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/kp..130MEY Output file: /Exps/c192c/v2/1234/No0072/kp.W.230.130MEY

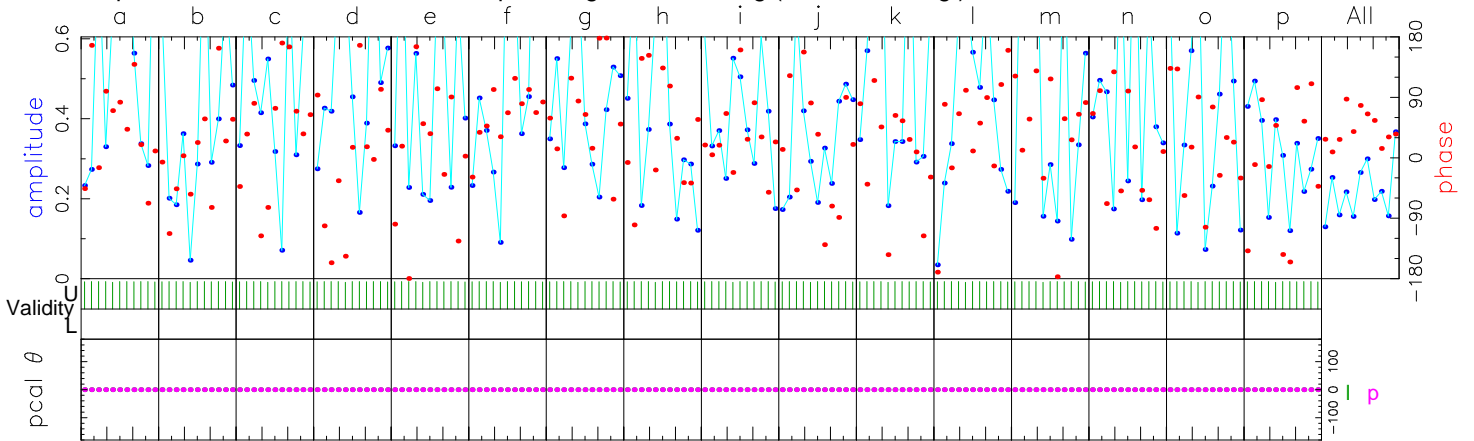


Fringe quality 9

SNR 7.4
Int time 179.070
Amp 0.202
Phase 44.0
PFD 2.5e-05
Delays (us)
SBD 0.005118
MBD 0.003529
Fringe rate (Hz) 0.002047
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054437
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



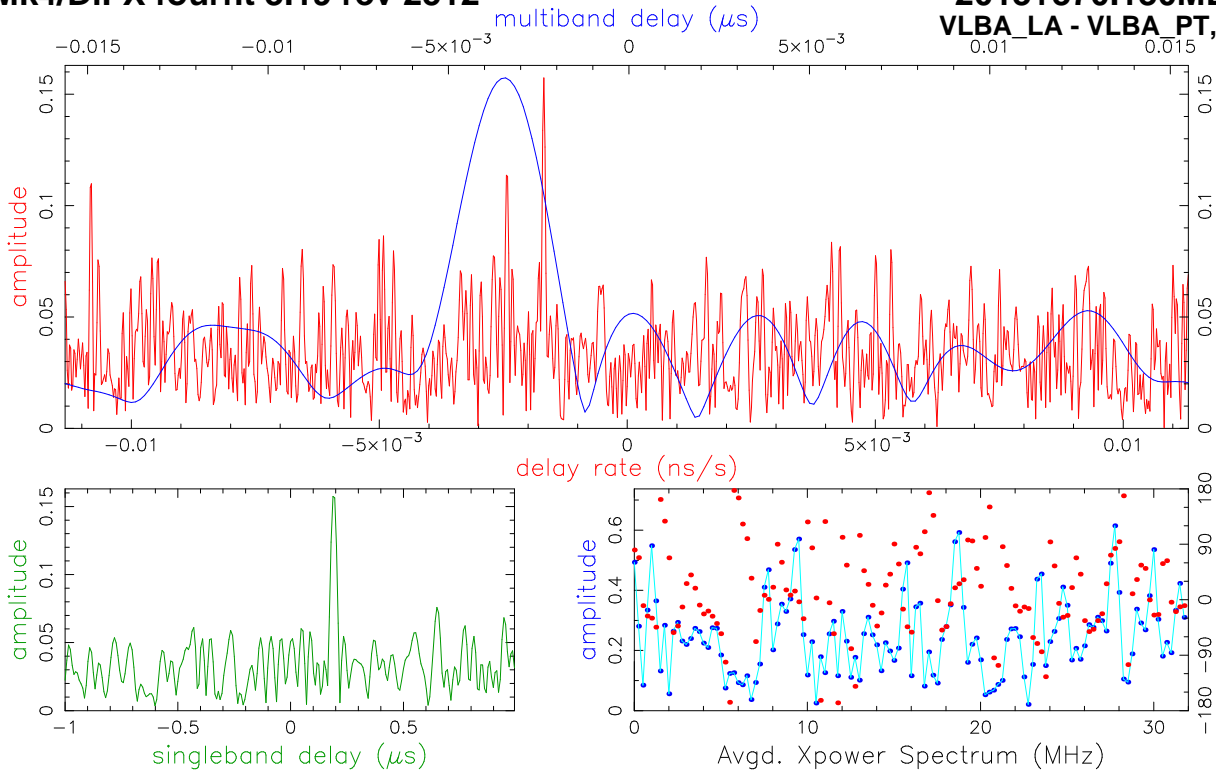
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000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

Group delay (usec)(sbd)	1.90377009940E+02	Apriori delay (usec)	1.90373480891E+02	Resid mbdelay (usec)	3.52905E-03	+/-	1.5E-04
Sband delay (usec)	1.90378598391E+02	Apriori clock (usec)	-1.2755054E+01	Resid sbdelay (usec)	5.11750E-03	+/-	2.3E-03
Phase delay (usec)	1.90373482311E+02	Apriori clockrate (us/s)	-5.5535860E-07	Resid phdelay (usec)	1.42002E-06	+/-	5.0E-07
Delay rate (us/s)	-3.74882434644E-02	Apriori rate (us/s)	-3.74882672237E-02	Resid rate (us/s)	2.37594E-08	+/-	4.8E-09
Total phase (deg)	275.8	Apriori accel (us/s/s)	3.55380843206E-07	Resid phase (deg)	44.0	+/-	15.5

ph/seg (deg)	24.5	RMS	24.5	Theor.	25.8	Amplitude	0.202 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	35.1	Search (1024X64)	0.198	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	Interp.	0.000	sb window (us)	-1.000	1.000	
ph/frq (deg)	29.9	Inc. seg. avg.	0.200	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.016	0.016	
amp/frq (%)	60.5	Inc. frq. avg.	0.193	Sample rate(MSamp/s):	64	Data rate(Mb/s):	2048	nlags:	128	t_cohere	infinite
				ion window (TEC)	0.00	0.00					

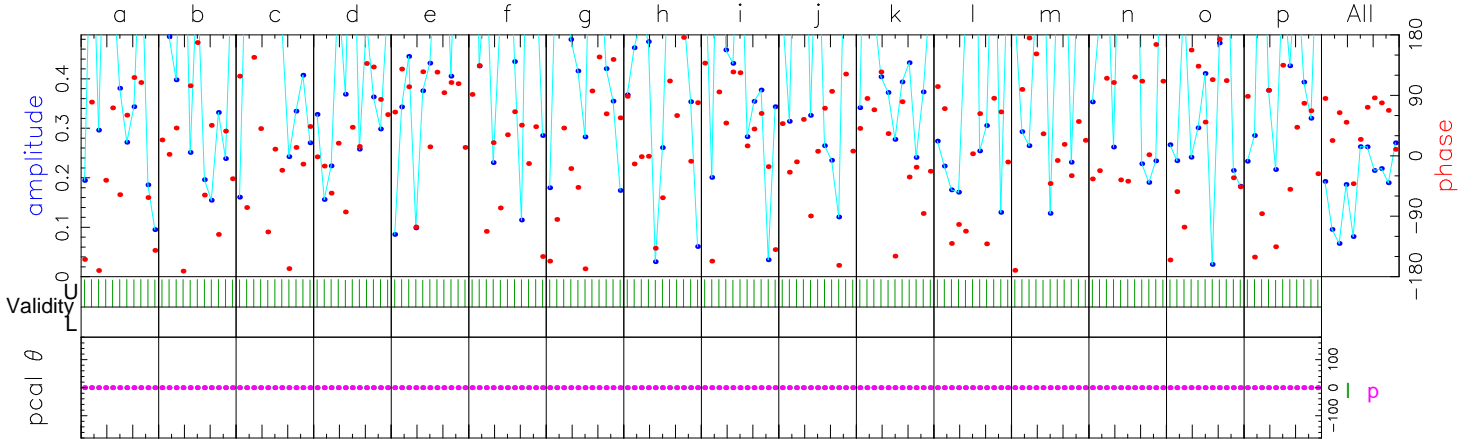
l: az 78.8 el 73.2 pa -88.7 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 270.268 167.901 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/lp..130MEY Output file: /Exps/c192c/v2/1234/No0072/lp.W.259.130MEY



Fringe quality 0
SNR 5.9
Int time 179.070
Amp 0.163
Phase 53.5
PFD 3.5e-01
Delays (us)
SBD 0.191182
MBD -0.003444
Fringe rate (Hz)
-0.144817
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054440
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

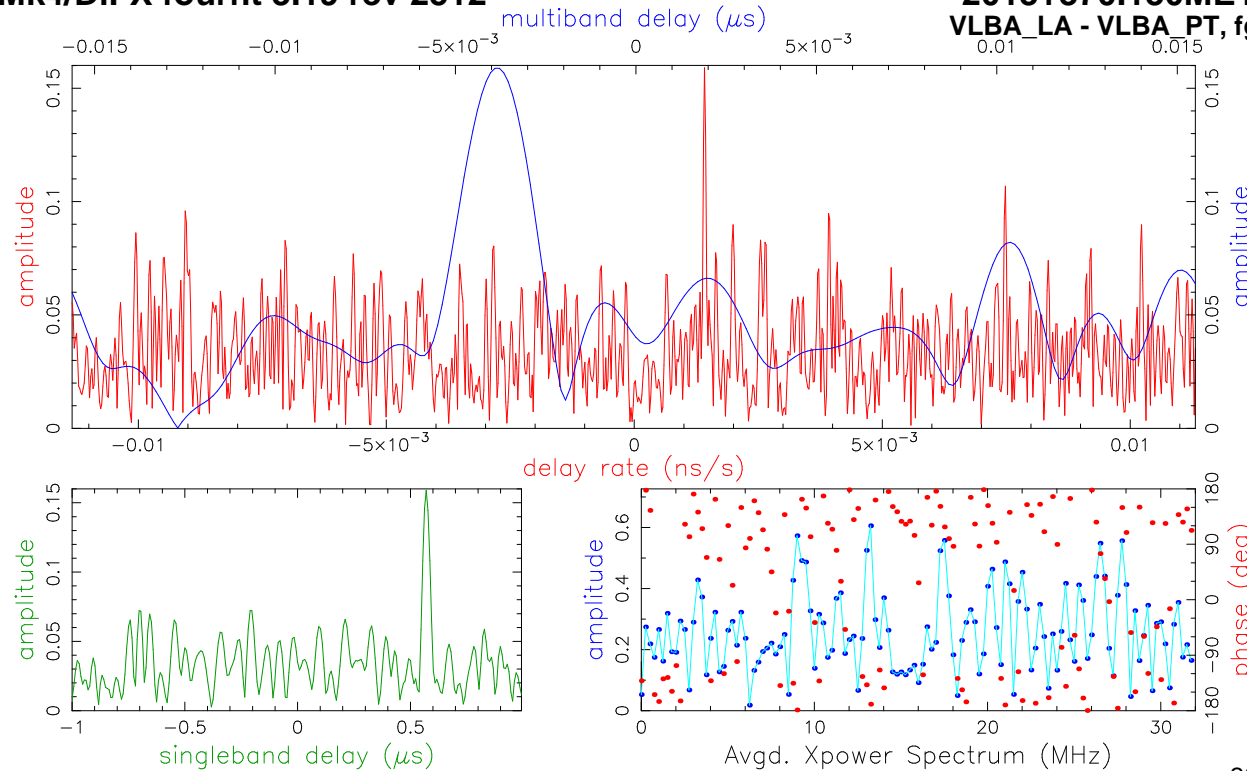


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
lp	0:0	0:0	0:0	0:0	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		
p	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
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	1.90557537367E+02			Apriori delay (usec)			1.90373480891E+02			Resid mbdelay (usec)			-3.44352E-03			+/-	1.8E-04	
Sband delay (usec)	1.90564663391E+02			Apriori clock (usec)			-1.2755054E+01			Resid sbdelay (usec)			1.91182E-01			+/-	2.9E-03	
Phase delay (usec)	1.90373482616E+02			Apriori clockrate (us/s)			-5.5535860E-07			Resid phdelay (usec)			1.72486E-06			+/-	6.3E-07	
Delay rate (us/s)	-3.74899484071E-02			Apriori rate (us/s)			-3.74882672237E-02			Resid rate (us/s)			-1.68118E-06			+/-	6.0E-09	
Total phase (deg)	285.3			Apriori accel (us/s/s)			3.55380843206E-07			Resid phase (deg)			53.5			+/-	19.4	

ph/seg (deg) 38.1 32.2 Search (1024X64) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 45.9 56.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 42.0 38.8 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.1 67.7 Inc. frq. avg. 0.155 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 78.8 el 73.2 pa -88.7 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 270.268 167.901 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/lp..130MEY Output file: /Exps/c192c/v2/1234/No0072/lp.W.279.130MEY

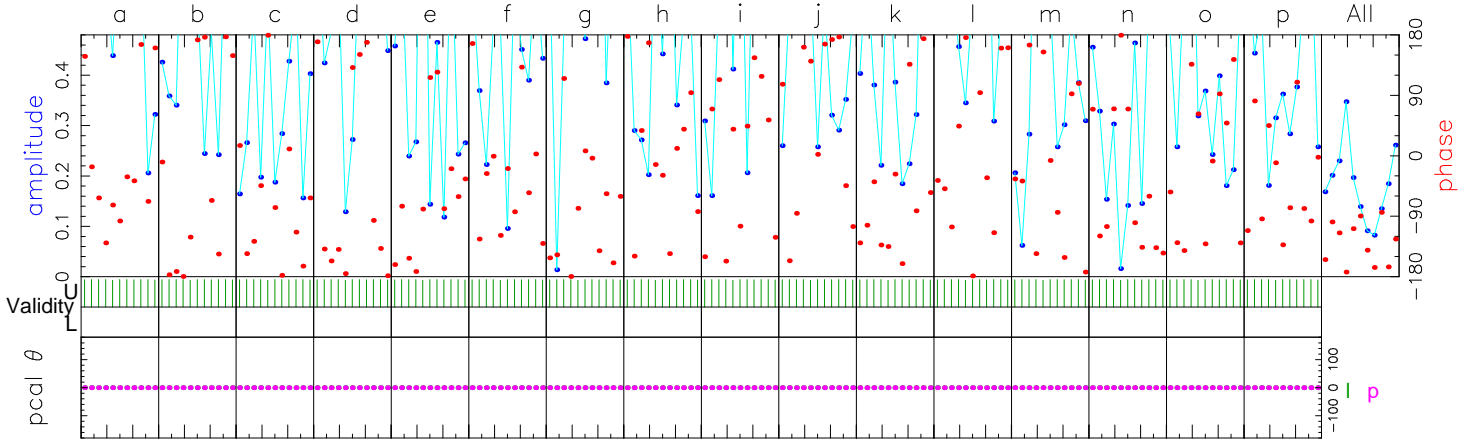
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, lp
VLBA_LA - VLBA_PT, fgroup W, pol LR



Fringe quality 0
SNR 5.8
Int time 179.070
Amp 0.160
Phase -130.9
PFD 5.2e-01
Delays (us)
SBD 0.570089
MBD -0.003845
Fringe rate (Hz) 0.121679
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054442
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

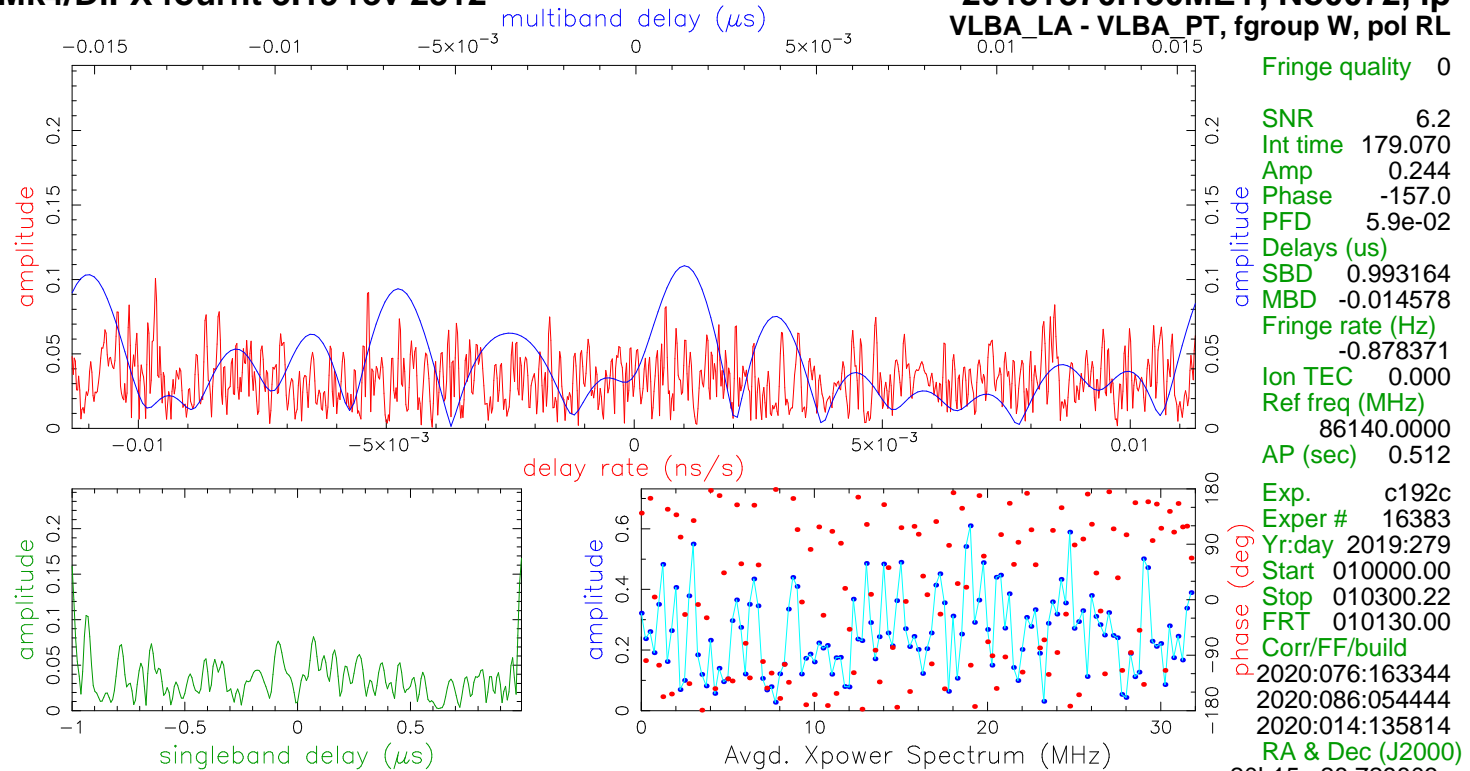


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-77.3	-166.5	-115.4	-164.8	-85.8	-85.7	-125.3	2.8	173.2	-156.5	-112.8	-89.8	179.0	-119.2	-174.2	-84.2	Phase	-130.9
	0.3	0.3	0.2	0.4	0.2	0.1	0.3	0.0	0.2	0.2	0.3	0.1	0.2	0.1	0.2	0.1	Ampl.	0.2
	43.4	99.6	193.3	200.9	169.3	250.0	73.4	252.2	46.1	180.0	60.5	252.5	122.1	217.8	135.0	29.7	Sbd box	202.0
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	
l	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 freqs	
lp	0:0	0:0	0:0	0:0	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	
lp	0:0	0:0	0:0	0:0	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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	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) 1.90932135756E+02 Apriori delay (usec) 1.90373480891E+02 Resid mbdelay (usec) -3.84513E-03 +/- 1.9E-04
Sband delay (usec) 1.90943569391E+02 Apriori clock (usec) -1.2755054E+01 Resid sbdelay (usec) 5.70089E-01 +/- 3.0E-03
Phase delay (usec) 1.90373476671E+02 Apriori clockrate (us/s) -5.5535860E-07 Resid phdelay (usec) -4.22000E-06 +/- 6.3E-07
Delay rate (us/s) -3.74868546461E-02 Apriori rate (us/s) -3.74882672237E-02 Resid rate (us/s) 1.41258E-06 +/- 6.1E-09
Total phase (deg) 100.9 Apriori accel (us/s/s) 3.55380843206E-07 Resid phase (deg) -130.9 +/- 19.7

RMS Theor. Amplitude 0.160 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 31.1 32.6 Search (1024X64) 0.156 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 48.9 57.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 53.4 39.4 Inc. seg. avg. 0.160 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 65.3 68.7 Inc. frq. avg. 0.165 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 78.8 el 73.2 pa -88.7 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 270.268 167.901 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/lp..130MEY Output file: /Exps/c192c/v2/1234/No0072/lp.W.297.130MEY



Fringe quality 0

SNR 6.2

Int time 179.070

Amp 0.244

Phase -157.0

PFD 5.9e-02

Delays (us)

SBD 0.993164

MBD -0.014578

Fringe rate (Hz)

-0.878371

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:279

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:076:163344

2020:086:054444

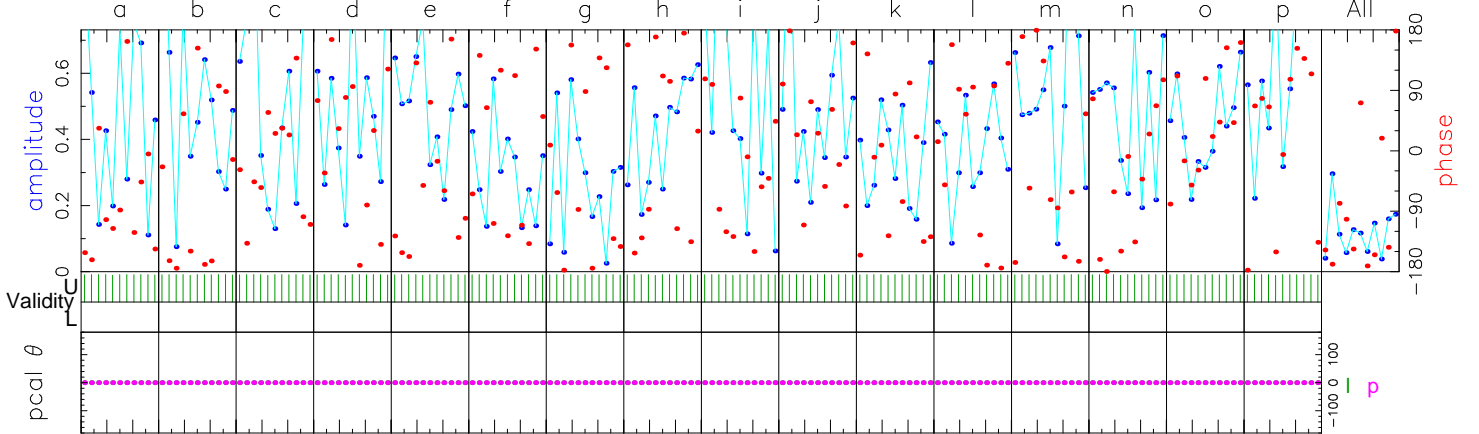
2020:014:135814

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
	-119.7	162.0	-57.5	103.9	-130.9	-155.5	-149.6	-173.3	-111.5	78.5	-109.9	106.5	-131.9	168.7	60.0	144.0	Phase	-157.0
	0.5	0.1	0.4	0.3	0.3	0.1	0.2	0.3	0.2	0.1	0.2	0.2	0.4	0.1	0.2	0.5	Ampl.	0.2
	86.4	139.7	108.3	137.2	255.6	47.3	240.4	82.5	32.0	69.7	144.7	10.8	19.3	188.3	116.2	255.5	Sbd box	256.1
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	
l	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 freqs	
lp	0:0	0:0	0:0	0:0	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	
lp	0:0	0:0	0:0	0:0	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	
p	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	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	1.91358902940E+02		Apriori delay (usec)		1.90373480891E+02		Resid mbdelay (usec)		-1.45780E-02		+/-		1.7E-04					
Sband delay (usec)	1.91366644641E+02		Apriori clock (usec)		-1.2755054E+01		Resid sbdelay (usec)		9.93164E-01		+/-		2.8E-03					
Phase delay (usec)	1.90373475828E+02		Apriori clockrate (us/s)		-5.5535860E-07		Resid phdelay (usec)		-5.06300E-06		+/-		5.9E-07					
Delay rate (us/s)	-3.74984642351E-02		Apriori rate (us/s)		-3.74882672237E-02		Resid rate (us/s)		-1.01970E-05		+/-		5.7E-09					
Total phase (deg)	74.8		Apriori accel (us/s/s)		3.55380843206E-07		Resid phase (deg)		-157.0		+/-		18.4					

ph/seg (deg) 73.3 30.5 Search (1024X64) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 51.1 53.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 74.9 36.8 Inc. seg. avg. 0.152 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

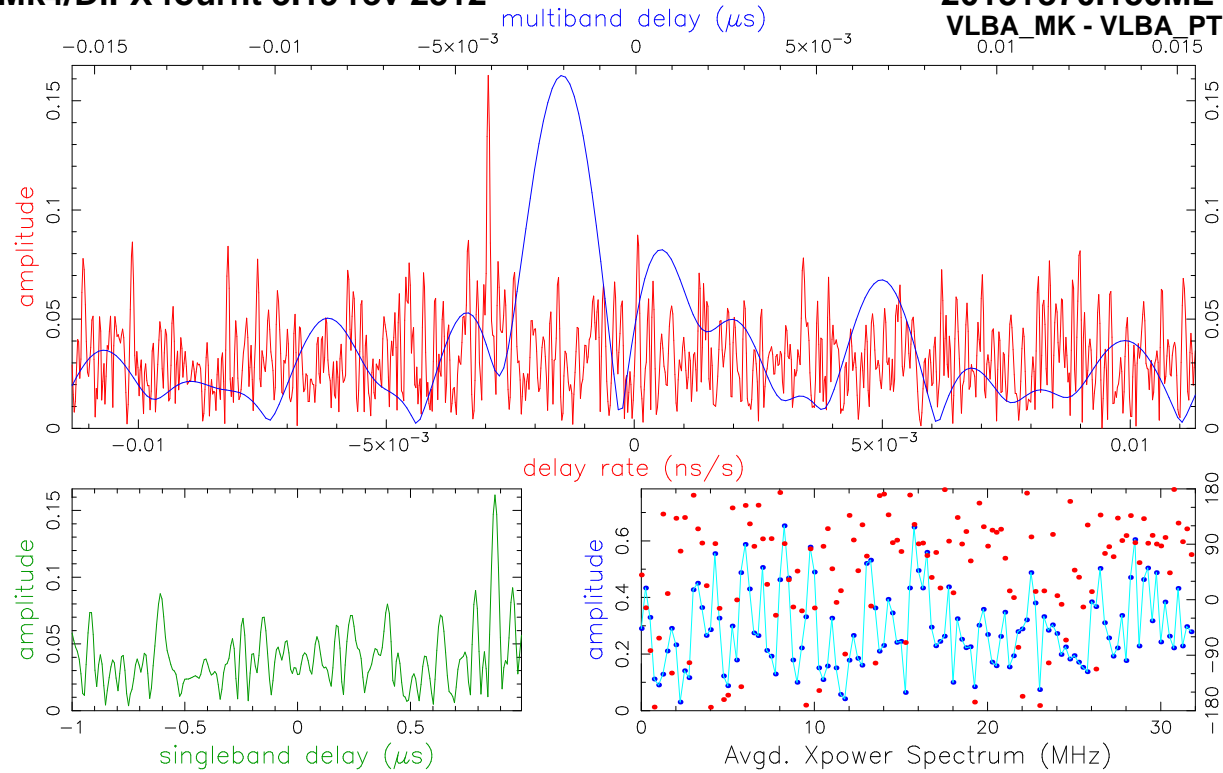
amp/frq (%) 58.2 64.1 Inc. frq. avg. 0.203 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

l: az 78.8 el 73.2 pa -88.7 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 270.268 167.901 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/lp..130MEY Output file: /Exps/c192c/v2/1234/No0072/lp.W.314.130MEY

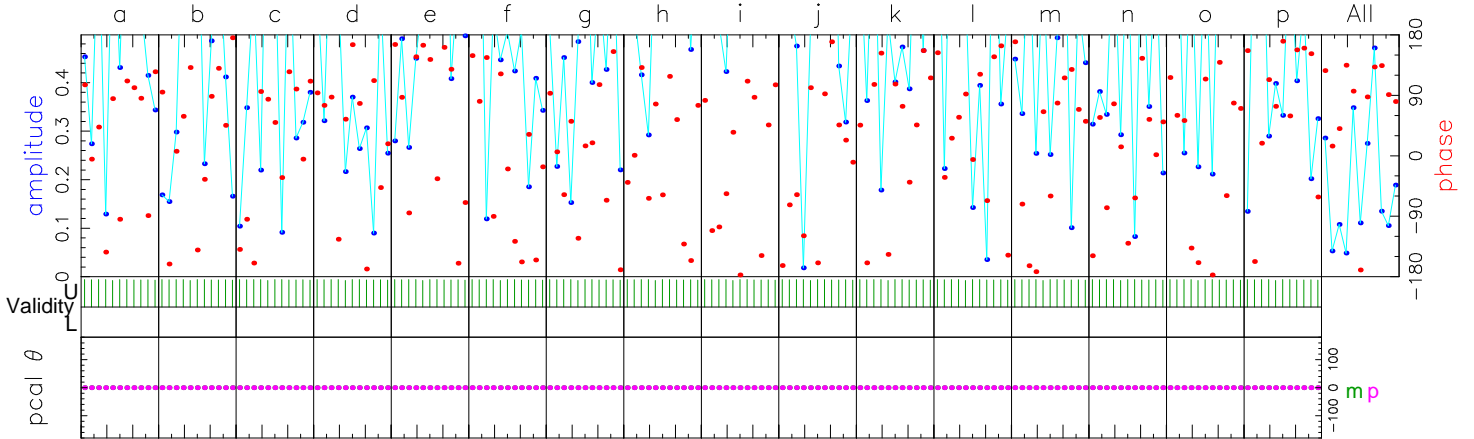
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, mp
VLBA_MK - VLBA_PT, fgroup W, pol LL



Fringe quality 0
SNR 5.9
Int time 178.282
Amp 0.166
Phase 109.3
PFD 3.7e-01
Delays (us)
SBD 0.875008
MBD -0.002048
Fringe rate (Hz)
-0.253577
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054437
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

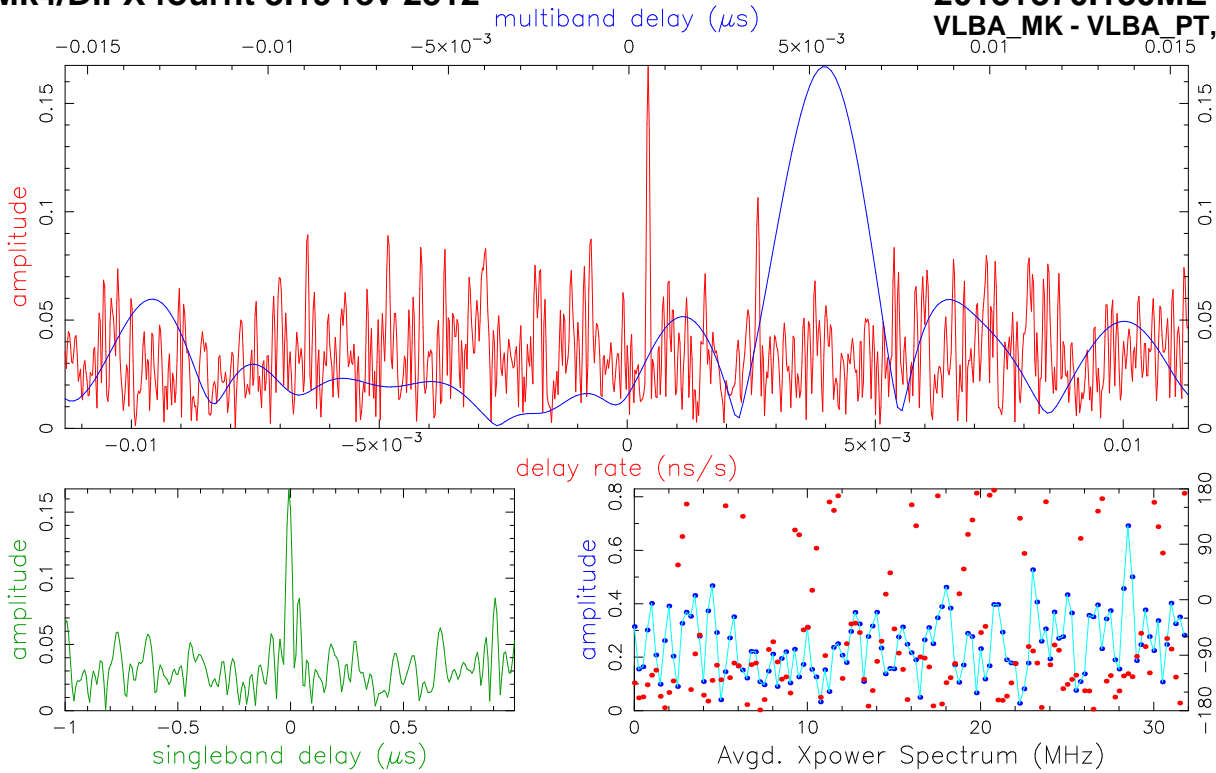


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000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

Group delay (usec)(sbd) -1.03171588902E+04 Apriori delay (usec) -1.03180318420E+04 Resid mbdelay (usec) -2.04820E-03 +/- 1.8E-04
 Sband delay (usec) -1.03171568345E+04 Apriori clock (usec) -9.3875494E+00 Resid sbdelay (usec) 8.75008E-01 +/- 2.9E-03
 Phase delay (usec) -1.03180318385E+04 Apriori clockrate (us/s) -2.1257888E-07 Resid phdelay (usec) 3.52557E-06 +/- 6.3E-07
 Delay rate (us/s) 7.01856017830E-01 Apriori rate (us/s) 7.01858961606E-01 Resid rate (us/s) -2.94378E-06 +/- 6.0E-09
 Total phase (deg) -204.0 Apriori accel (us/s/s) 3.94944596974E-05 Resid phase (deg) 109.3 +/- 19.4

RMS Theor. Amplitude 0.166 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 47.0 32.2 Search (1024X64) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 81.9 56.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 34.0 38.8 Inc. seg. avg. 0.171 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 49.4 67.8 Inc. frq. avg. 0.151 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 57.5 el 27.4 pa -85.0 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -5022.804 806.030 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/mp..130MEY Output file: /Exps/c192c/v2/1234/No0072/mp.W.255.130MEY

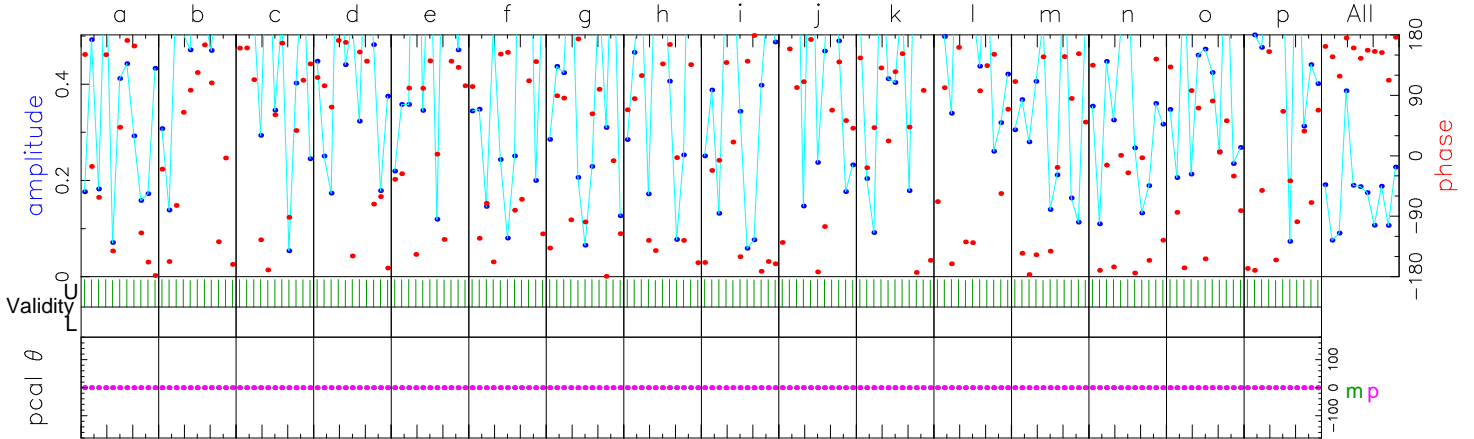


Fringe quality 0

SNR 6.1
Int time 178.283
Amp 0.168
Phase 157.9
PFD 1.2e-01
Delays (us)
SBD -0.006665
MBD 0.005433
Fringe rate (Hz) 0.035607
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054440
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

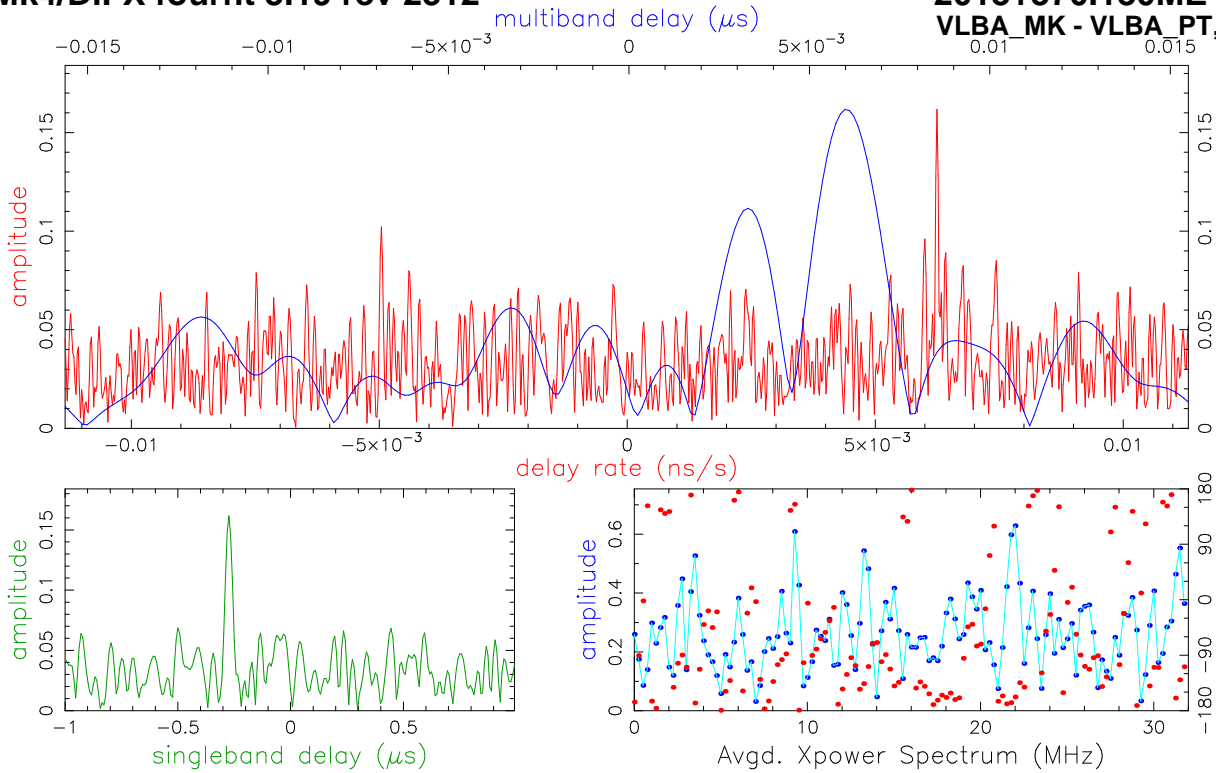


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All						
	167.3	163.3	145.8	167.0	154.4	-144.3	96.5	151.8	-172.6	140.9	139.1	166.5	151.0	-79.9	98.7	-149.0		Phase 157.9						
	0.1	0.2	0.3	0.3	0.3	0.1	0.0	0.3	0.1	0.3	0.3	0.2	0.2	0.0	0.1	0.1		Ampl. 0.2						
	37.3	161.6	128.4	244.8	51.3	6.6	244.7	128.1	168.4	45.7	189.5	184.4	23.4	118.2	180.0	218.0		Sbd box 128.1						
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						
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								
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000								
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids						
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks						
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids						
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks						
Group delay (usec)(sbd)			-1.03180264085E+04															Apriori delay (usec)	-1.03180318420E+04	Resid mbdelay (usec)	5.43347E-03	+/-	1.8E-04	
Sband delay (usec)			-1.03180385070E+04																Apriori clock (usec)	-9.3875494E+00	Resid sbdelay (usec)	-6.66500E-03	+/-	2.8E-03
Phase delay (usec)			-1.03180318369E+04																Apriori clockrate (us/s)	-2.1257888E-07	Resid phdelay (usec)	5.09289E-06	+/-	6.0E-07
Delay rate (us/s)			7.01859374973E-01																Apriori rate (us/s)	7.01858961606E-01	Resid rate (us/s)	4.13367E-07	+/-	5.8E-09
Total phase (deg)						-155.4													Apriori accel (us/s/s)	3.94944596974E-05	Resid phase (deg)	157.9	+/-	18.7

ph/seg (deg) RMS Theor. Amplitude 0.168 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.5 54.2 Search (1024X64) 0.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.6 37.5 Inc. seg. avg. 0.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.2 65.4 Inc. frq. avg. 0.153 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 57.5 el 27.4 pa -85.0 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -5022.804 806.030 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/mp..130MEY Output file: /Exps/c192c/v2/1234/No0072/mp.W.277.130MEY

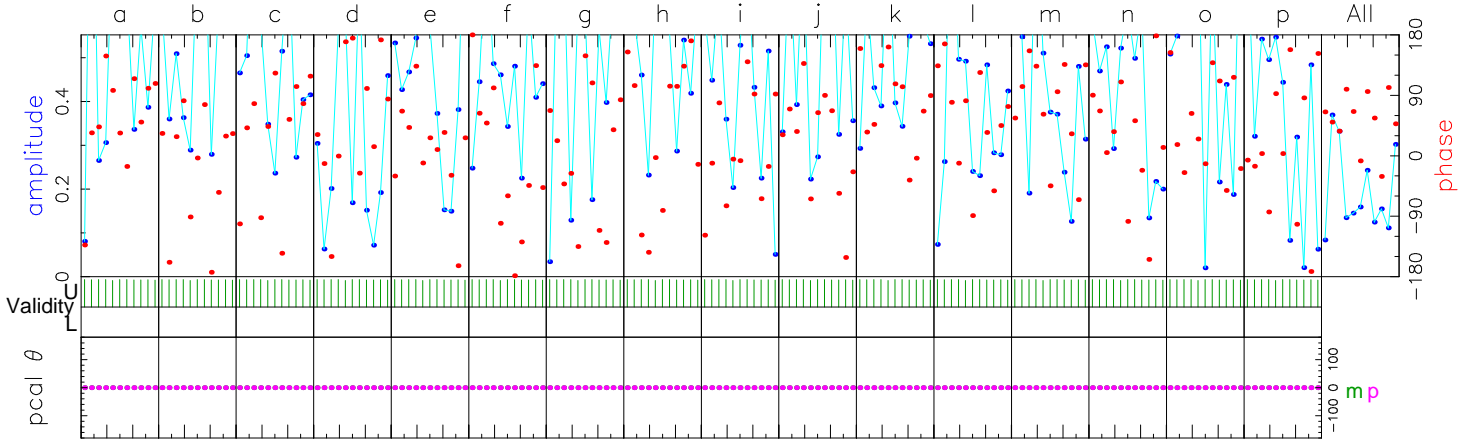
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, mp
VLBA_MK - VLBA_PT, fgroup W, pol LR



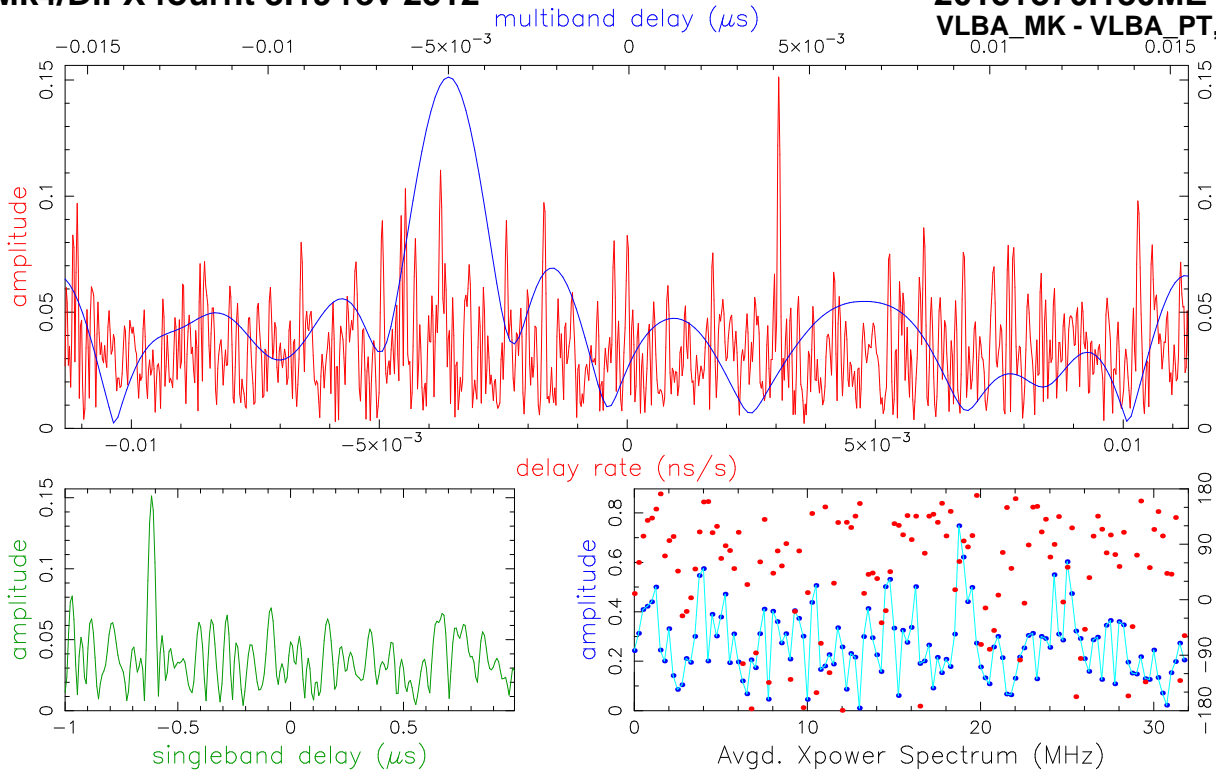
Fringe quality 0
SNR 5.9
Int time 178.282
Amp 0.184
Phase 52.0
PFD 3.6e-01
Delays (us)
SBD -0.273755
MBD 0.006029
Fringe rate (Hz) 0.539585
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054442
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



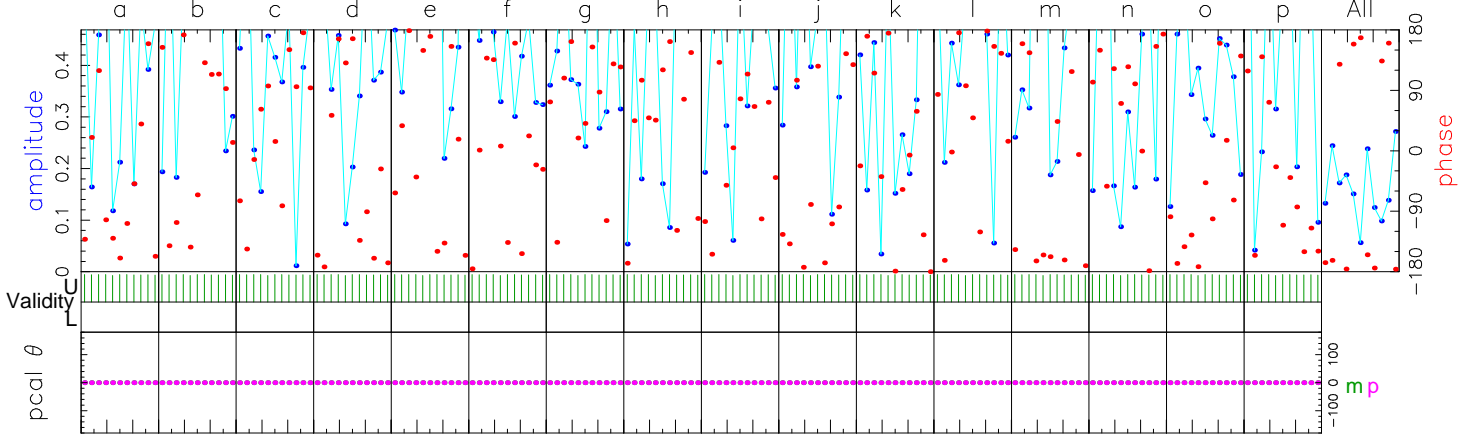
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0							
m	1000	1000	1000	1000	1000	1000	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)			-1.03183070634E+04															Apriori delay (usec)	-1.03180318420E+04	Resid mbdelay (usec)	6.02864E-03	+/-	1.8E-04
Sband delay (usec)			-1.03183055965E+04															Apriori clock (usec)	-9.3875494E+00	Resid sbdelay (usec)	-2.73755E-01	+/-	2.9E-03
Phase delay (usec)			-1.03180318403E+04															Apriori clockrate (us/s)	-2.1257888E-07	Resid phdelay (usec)	1.67681E-06	+/-	6.3E-07
Delay rate (us/s)			7.01865225655E-01															Apriori rate (us/s)	7.01858961606E-01	Resid rate (us/s)	6.26405E-06	+/-	6.0E-09
Total phase (deg)					-261.3													Apriori accel (us/s/s)	3.94944596974E-05	Resid phase (deg)	52.0	+/-	19.4

ph/seg (deg) 40.0 32.2 Amplitude 0.184 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 61.7 56.1 Search (1024X64) 0.159 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 38.6 38.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 61.2 67.7 Inc. seg. avg. 0.193 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
m: az 57.5 el 27.4 pa -85.0 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -5022.804 806.030 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/mp..130MEY Output file: /Exps/c192c/v2/1234/No0072/mp.W.294.130MEY simultaneous interpolator



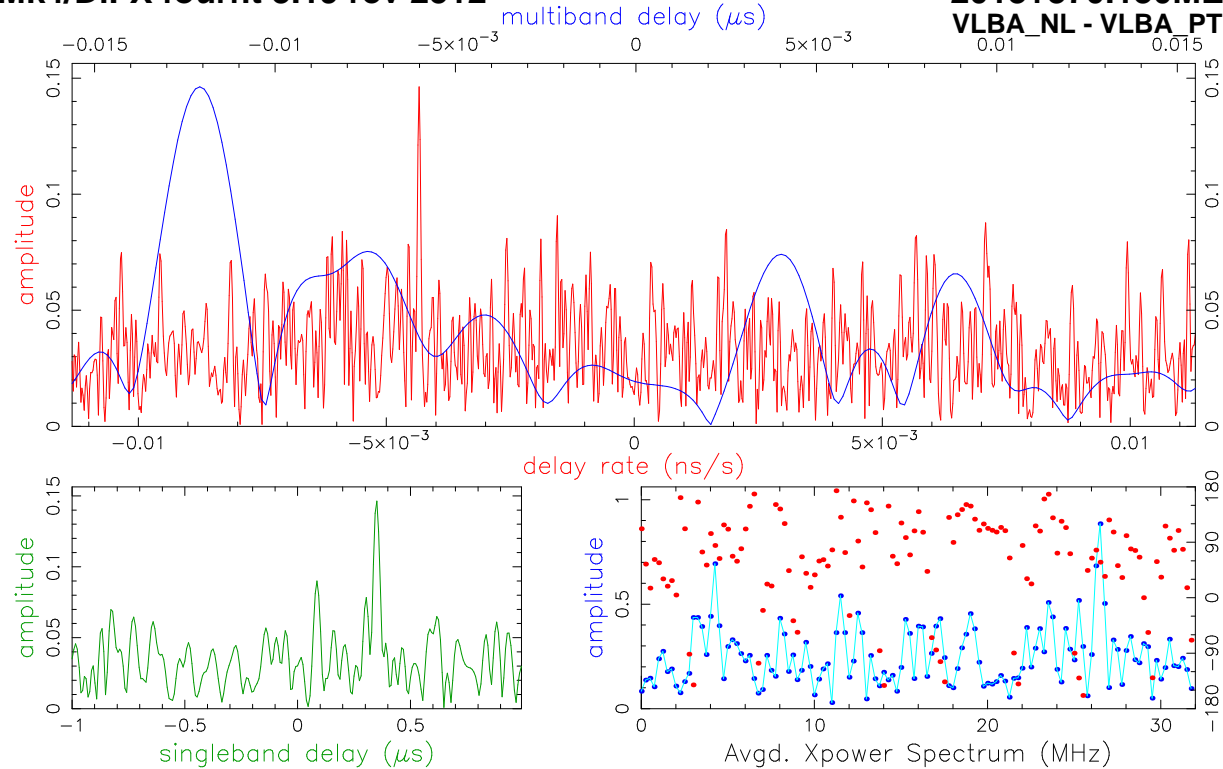
Fringe quality 0
SNR 5.5
Int time 178.283
Amp 0.156
Phase 177.6
PFD 9.7e-01
Delays (us)
SBD -0.615903
MBD -0.004979
Fringe rate (Hz) 0.263512
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054444
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
	-136.7	164.0	164.9	-153.8	-162.7	155.5	128.5	94.0	95.2	-176.6	-164.4	111.9	-174.0	161.1	-135.8	-146.4	Phase	177.6
	0.2	0.2	0.1	0.3	0.3	0.1	0.3	0.1	0.1	0.3	0.2	0.2	0.4	0.2	0.2	0.1	Ampl.	0.2
	163.8	167.2	19.5	215.4	51.7	94.0	180.9	225.2	197.0	92.2	64.2	5.5	48.9	44.0	169.4	203.8	Sbd box	50.2
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	
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)	-1.03186618211E+04			Apriori delay (usec)			-1.03180318420E+04			Resid mbdelay (usec)			-4.97909E-03			+/-	1.9E-04	
Sband delay (usec)	-1.03186477455E+04			Apriori clock (usec)			-9.3875494E+00			Resid sbdelay (usec)			-6.15903E-01			+/-	3.1E-03	
Phase delay (usec)	-1.03180318363E+04			Apriori clockrate (us/s)			-2.1257888E-07			Resid phdelay (usec)			5.72862E-06			+/-	6.7E-07	
Delay rate (us/s)	7.01862020720E-01			Apriori rate (us/s)			7.01858961606E-01			Resid rate (us/s)			3.05911E-06			+/-	6.4E-09	
Total phase (deg)	-135.6			Apriori accel (us/s/s)			3.94944596974E-05			Resid phase (deg)			177.6			+/-	20.7	

ph/seg (deg) RMS Theor. Amplitude 0.156 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 24.5 34.3 Search (1024X64) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.4 59.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.4 41.4 Inc. seg. avg. 0.144 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 64.9 72.2 Inc. frq. avg. 0.153 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 m: az 57.5 el 27.4 pa -85.0 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -5022.804 806.030 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/mp..130MEY Output file: /Exps/c192c/v2/1234/No0072/mp.W.309.130MEY

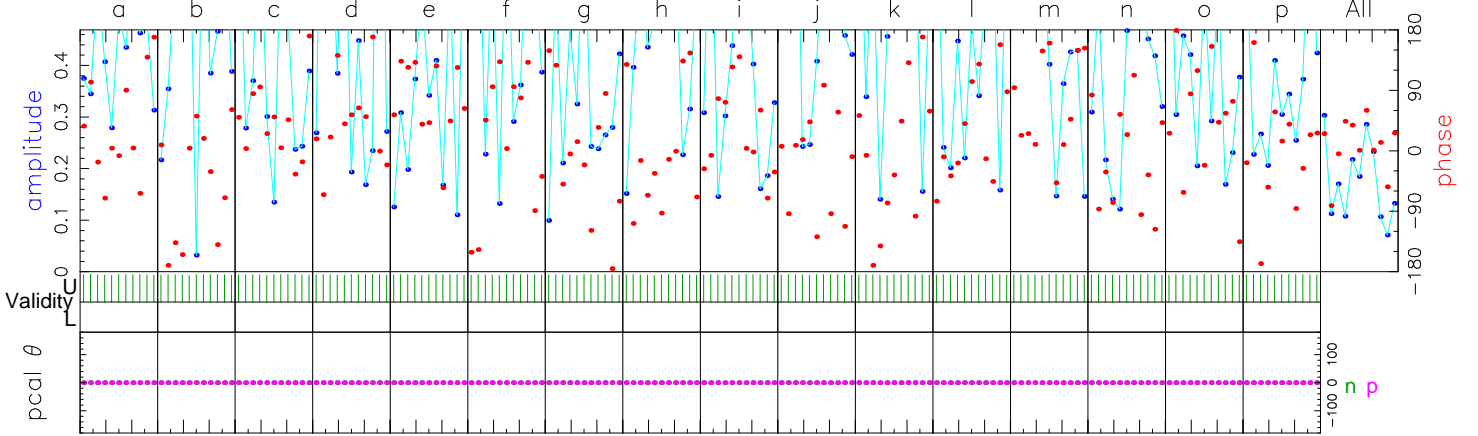


Fringe quality 0

SNR 5.4
Int time 178.237
Amp 0.156
Phase 17.7
PFD 1.0e+00
Delays (us)
SBD 0.349786
MBD -0.012081
Fringe rate (Hz)
-0.374117
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054445
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

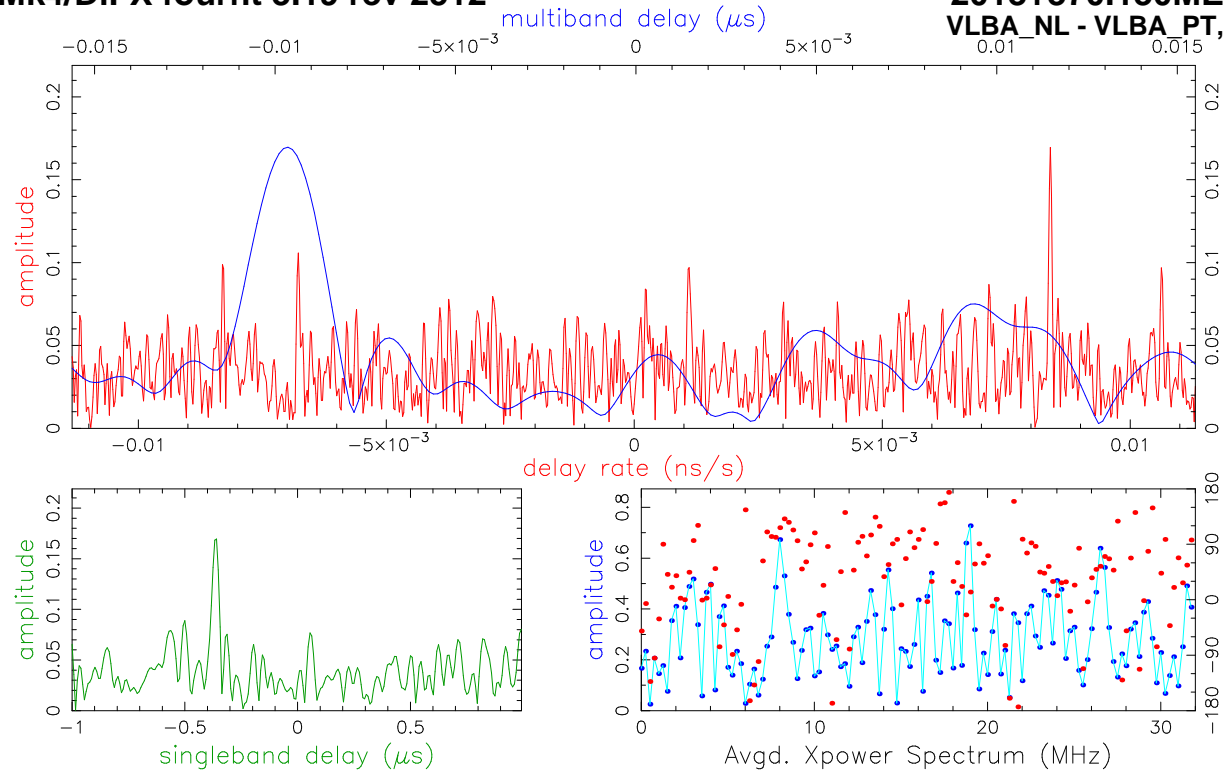
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	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
	13.5	-57.5	45.8	11.1	75.3	131.4	-6.3	-46.1	23.4	2.0	14.6	-1.3	66.4	-19.2	39.2	8.7	Phase	17.7
	0.2	0.1	0.3	0.3	0.3	0.1	0.1	0.3	0.2	0.3	0.1	0.2	0.2	0.1	0.1	0.2	Ampl.	0.2
	16.9	205.1	249.7	85.3	6.3	19.5	3.8	84.7	199.5	137.6	75.7	149.0	213.0	184.4	41.7	176.6	Sbd box	173.8
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	
n	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 freqs	
n: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	
n: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	
n	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	PC amp	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 9.60141695334E+02 Apriori delay (usec) 9.59778776503E+02 Resid mbdelay (usec) -1.20812E-02 +/- 2.0E-04
 Sband delay (usec) 9.60128562003E+02 Apriori clock (usec) 1.4553771E+01 Resid sbdelay (usec) 3.49786E-01 +/- 3.2E-03
 Phase delay (usec) 9.59778777075E+02 Apriori clockrate (us/s) -6.9663080E-08 Resid phdelay (usec) 5.71974E-07 +/- 6.9E-07
 Delay rate (us/s) -2.95217804670E-01 Apriori rate (us/s) -2.95213461544E-01 Resid rate (us/s) -4.34313E-06 +/- 6.6E-09
 Total phase (deg) 308.6 Apriori accel (us/s/s) 1.96761954897E-06 Resid phase (deg) 17.7 +/- 21.3

RMS Theor. Amplitude 0.156 +/- 0.029
 ph/seg (deg) 41.8 35.4 Search (1024X64) 0.145 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.6 61.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.0 42.7 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 58.8 74.5 Inc. frq. avg. 0.154 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 131.3 el 83.4 pa -43.1 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 2126.850 827.321 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/np..130MEY Output file: /Exps/c192c/v2/1234/No0072/np.W.317.130MEY

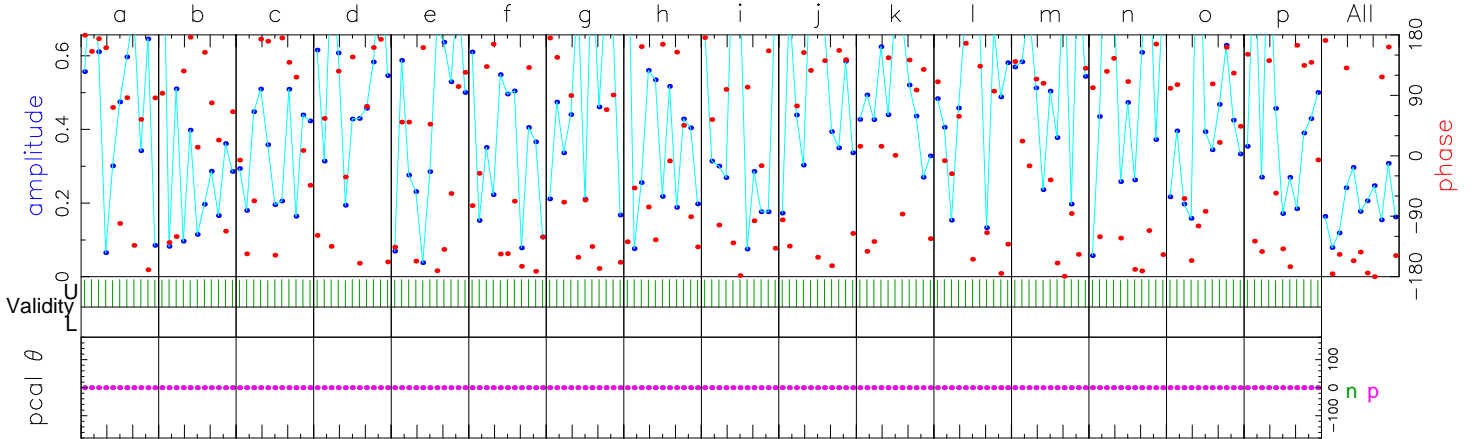


Fringe quality 0

SNR 6.3
Int time 178.237
Amp 0.219
Phase 178.8
PFD 3.7e-02
Delays (us)
SBD -0.362944
MBD -0.009701
Fringe rate (Hz)
0.723063
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054447
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
168.9	121.0	-156.9	177.5	131.6	-141.6	167.0	-110.2	-156.5	171.7	-106.7	153.9	164.0	-179.3	165.9	-177.0		Phase	178.8
0.3	0.2	0.1	0.4	0.1	0.2	0.2	0.2	0.3	0.4	0.0	0.3	0.2	0.5	0.1	0.3		Ampl.	0.2
2.1	132.9	30.2	203.9	38.2	25.1	184.3	180.7	110.3	149.0	233.7	112.2	15.3	213.0	195.8	23.8		Sbd box	82.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
n	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		PC phase	
n: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		ManI PC	
n: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		PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
n	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)	9.59425325070E+02			Apriori delay (usec)			9.59778776503E+02			Resid mbdelay (usec)			-9.70143E-03			+/-	1.7E-04	
Sband delay (usec)	9.59415832503E+02			Apriori clock (usec)			1.4553771E+01			Resid sbdelay (usec)			-3.62944E-01			+/-	2.7E-03	
Phase delay (usec)	9.59778782269E+02			Apriori clockrate (us/s)			-6.9663080E-08			Resid phdelay (usec)			5.76574E-06			+/-	5.9E-07	
Delay rate (us/s)	-2.95205067498E-01			Apriori rate (us/s)			-2.95213461544E-01			Resid rate (us/s)			8.39405E-06			+/-	5.6E-09	
Total phase (deg)	109.7			Apriori accel (us/s/s)			1.96761954897E-06			Resid phase (deg)			178.8			+/-	18.2	

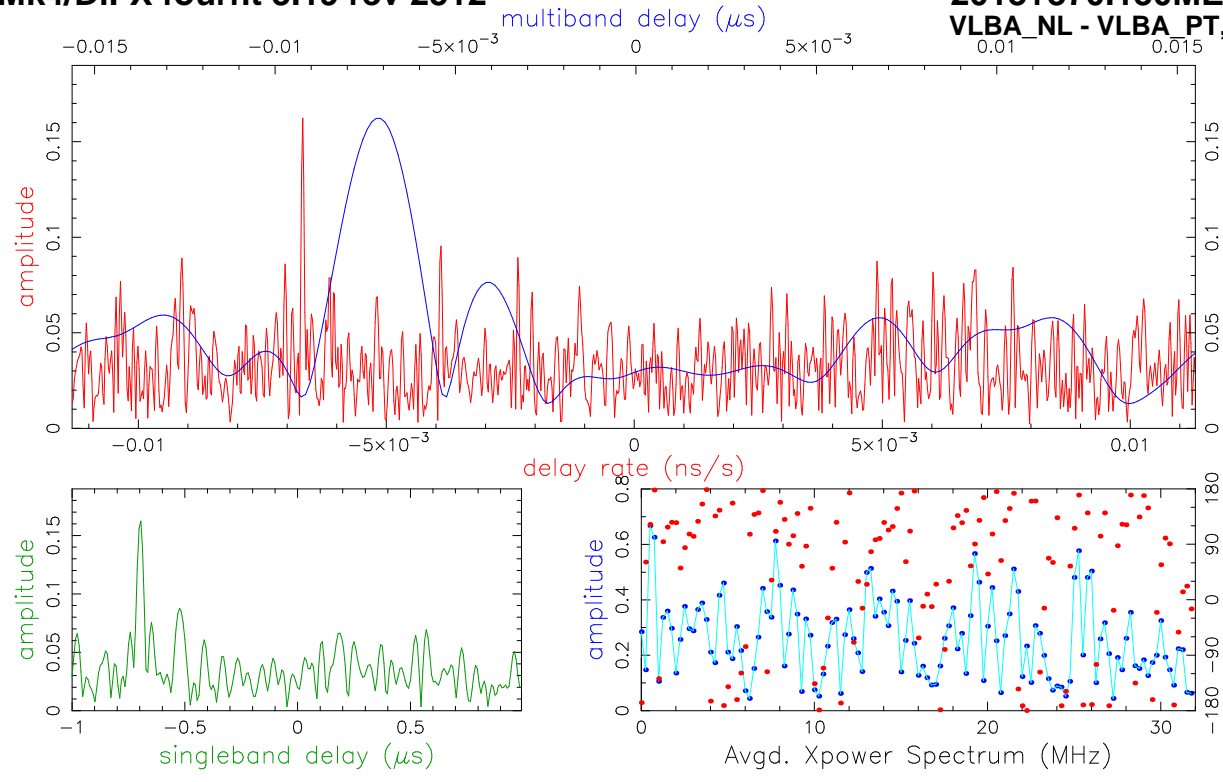
	RMS	Theor.	Amplitude	0.219 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	31.4	30.1	Search (1024X64)	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	41.6	52.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016	
ph/frq (deg)	38.0	36.3	Inc. seg. avg.	0.218	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	59.2	63.4	Inc. frq. avg.	0.201	Data rate(Mb/s): 2048	nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00

n: az 131.3 el 83.4 pa -43.1 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 2126.850 827.321 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/np..130MEY Output file: /Exps/c192c/v2/1234/No0072/np.W.329.130MEY

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, np
VLBA_NL - VLBA_PT, fgroup W, pol LR

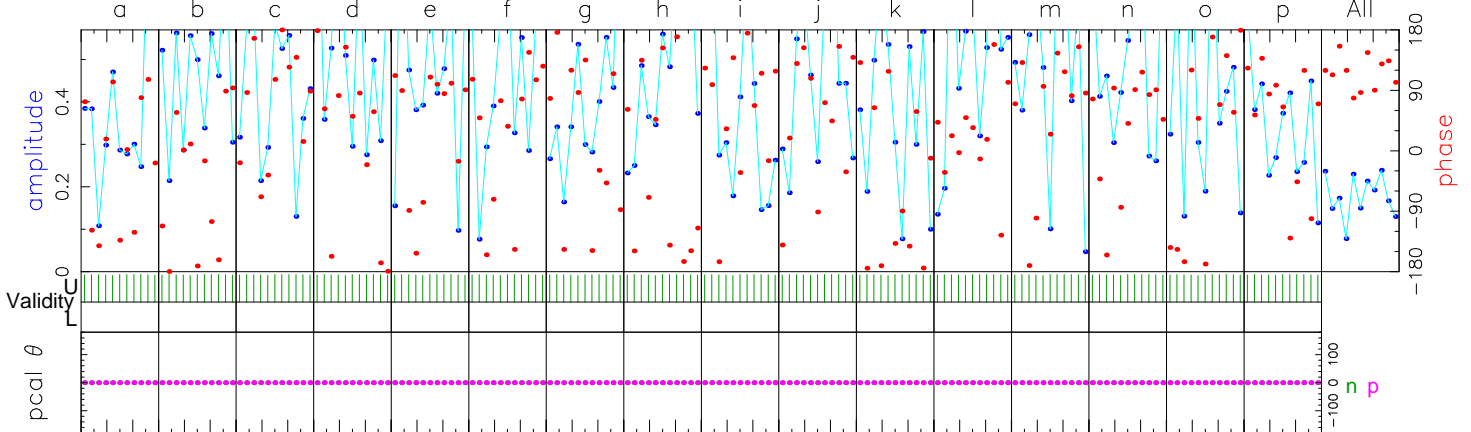


Fringe quality 0

SNR 6.0
Int time 178.237
Amp 0.190
Phase 116.4
PFD 2.5e-01
Delays (us)
SBD -0.697746
MBD -0.007176
Fringe rate (Hz)
-0.576115
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054449
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		
n	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		
n: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		
n: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		
n	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		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		9.59084100477E+02								9.59778776503E+02								
Sband delay (usec)		9.59081030503E+02								1.4553771E+01								
Phase delay (usec)		9.59778780255E+02								-6.9663080E-08								
Delay rate (us/s)		-2.95220149670E-01								-2.95213461544E-01								
Total phase (deg)				47.2						1.96761954897E-06								
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) 23.6 31.8
amp/seg (%) 30.5 55.4
ph/frq (deg) 43.3 38.3
amp/frq (%) 56.6 66.9

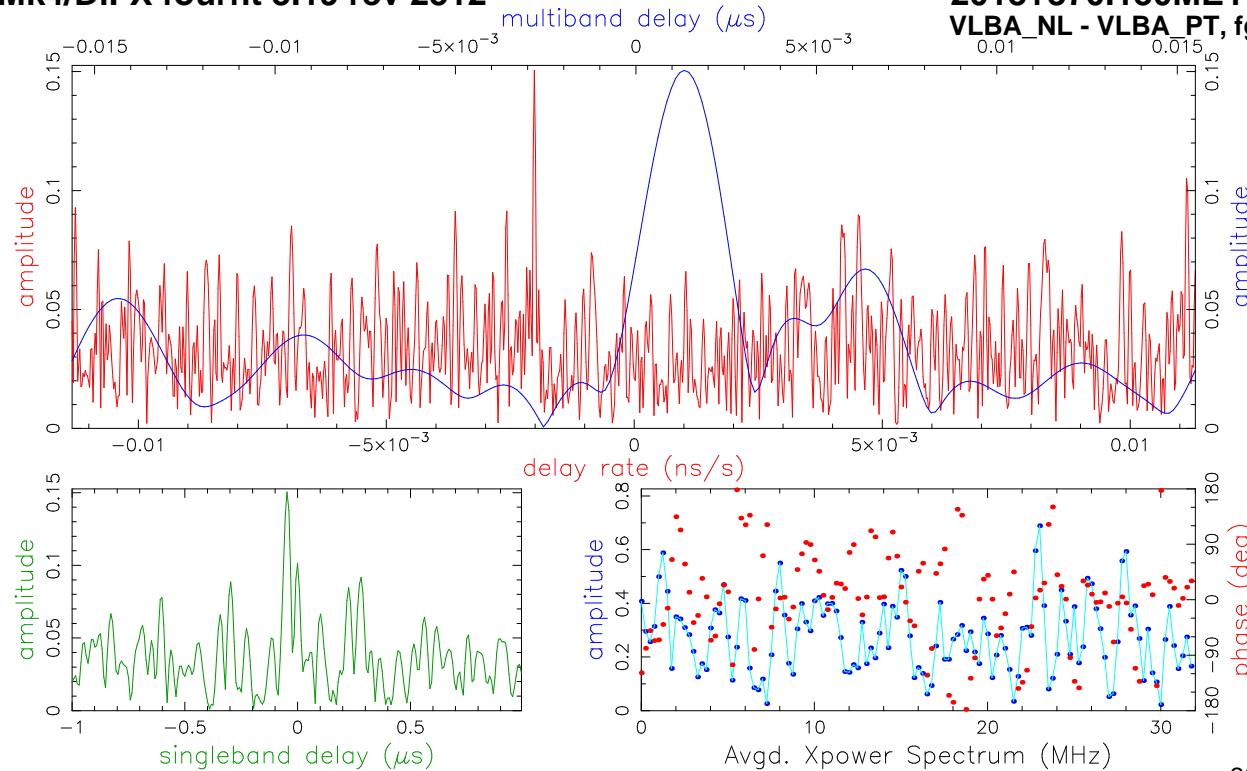
RMS Theor. Amplitude 0.190 +/- 0.032
Search (1024X64) 0.159
Interp. 0.000
Inc. seg. avg. 0.179
Inc. frq. avg. 0.193

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

n: az 131.3 el 83.4 pa -43.1 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 2126.850 827.321 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/np..130MEY Output file: /Exps/c192c/v2/1234/No0072/np.W.347.130MEY

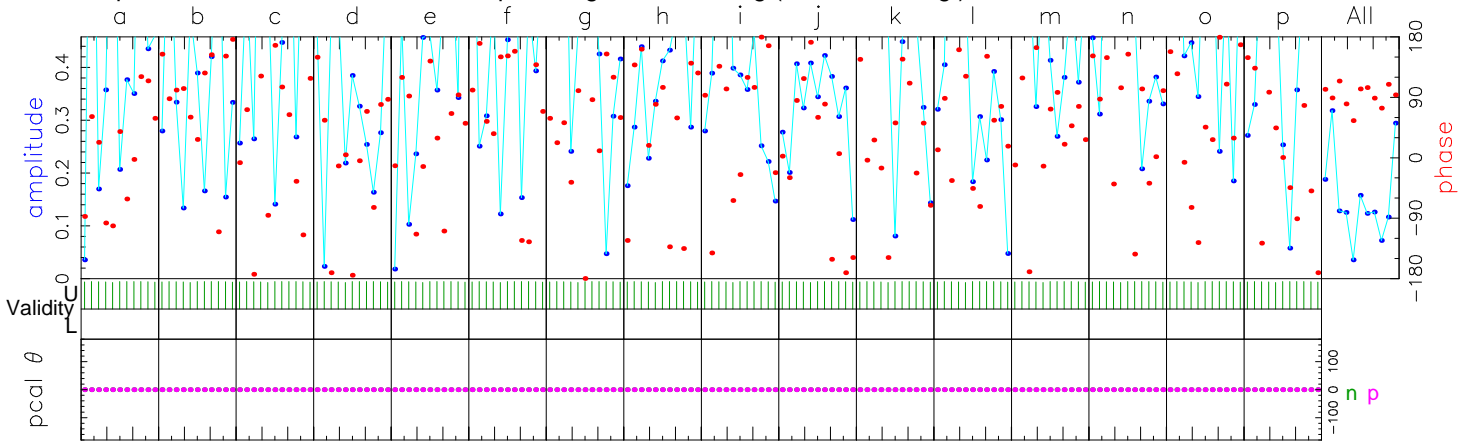


Fringe quality 0

SNR 5.5
Int time 178.237
Amp 0.153
Phase 95.0
PFD 9.9e-01
Delays (us)
SBD -0.046154
MBD 0.001345
Fringe rate (Hz)
-0.173781
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

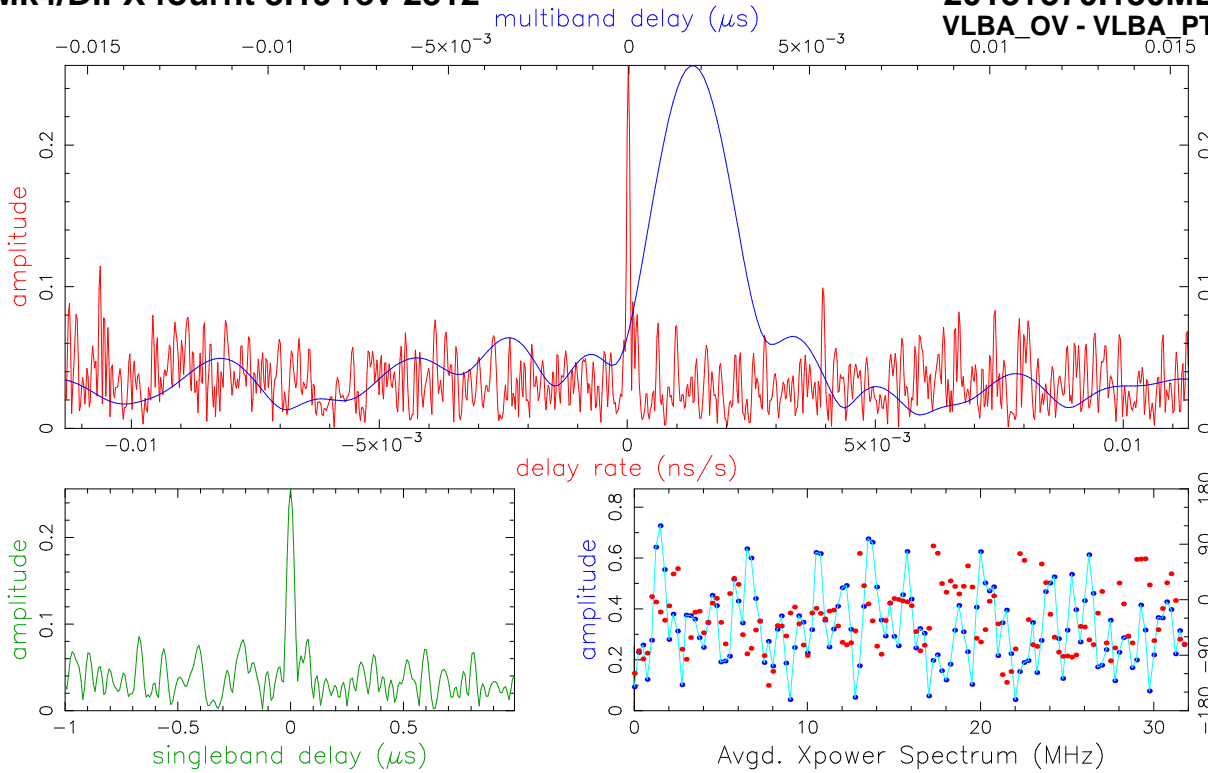
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054452
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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
58.3	119.9	109.2	90.5	66.2	122.6	67.1	138.4	123.2	104.6	42.1	56.0	60.5	125.8	102.8	117.9	117.9	Phase	95.0
0.1	0.2	0.2	0.1	0.2	0.2	0.4	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
230.4	80.8	187.4	12.2	69.0	130.2	121.9	49.0	254.7	247.9	26.1	3.2	73.1	78.4	251.8	240.8	240.8	Sbd box	123.1
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	
n	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	
n: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	
n: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	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
n	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)	9.59717621422E+02			Apriori delay (usec)			9.59778776503E+02			Resid mbdelay (usec)			1.34492E-03			+/- 2.0E-04		
Sband delay (usec)	9.59732622503E+02			Apriori clock (usec)			1.4553771E+01			Resid sbdelay (usec)			-4.61540E-02			+/- 3.1E-03		
Phase delay (usec)	9.59778779565E+02			Apriori clockrate (us/s)			-6.9663080E-08			Resid phdelay (usec)			3.06211E-06			+/- 6.7E-07		
Delay rate (us/s)	-2.95215478973E-01			Apriori rate (us/s)			-2.95213461544E-01			Resid rate (us/s)			-2.01743E-06			+/- 6.5E-09		
Total phase (deg)	25.8			Apriori accel (us/s/s)			1.96761954897E-06			Resid phase (deg)			95.0			+/- 20.8		

ph/seg (deg) 16.6 34.6 Search (1024X64) 0.153 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.1 60.3 Interp. 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.0 41.7 Inc. seg. avg. 0.132 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.0 72.7 Inc. frq. avg. 0.139 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 131.3 el 83.4 pa -43.1 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 2126.850 827.321 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/np..130MEY Output file: /Exps/c192c/v2/1234/No0072/np.W.368.130MEY

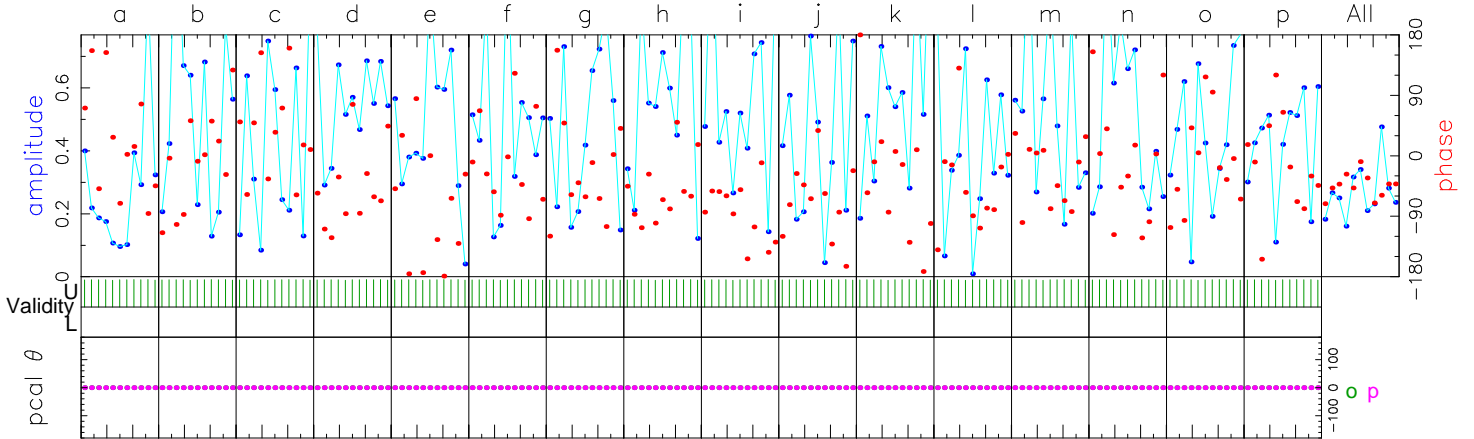


Fringe quality 9

SNR 9.4
Int time 178.084
Amp 0.256
Phase -44.7
PFD 1.7e-12
Delays (us)
SBD -0.000286
MBD 0.001764
Fringe rate (Hz) 0.001027
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054447
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

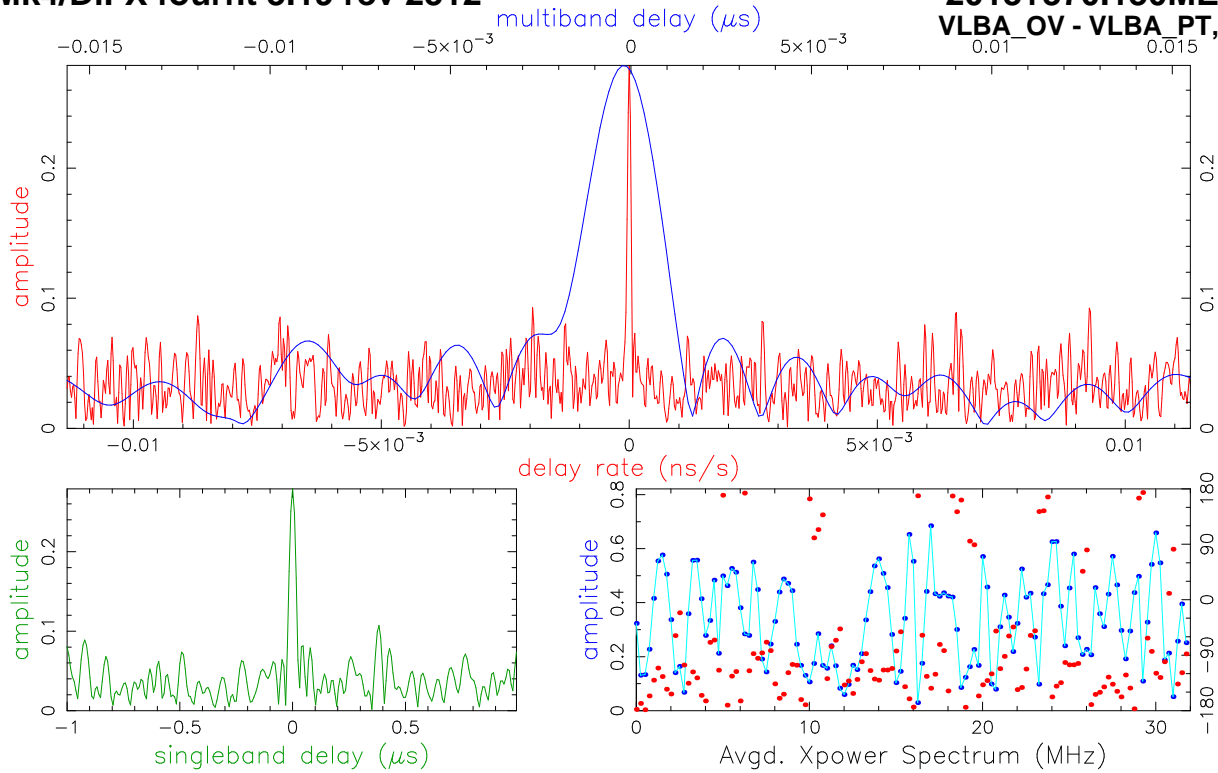


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-24.3	-34.3	-6.0	-50.7	-87.6	-18.7	-45.0	-63.5	-76.9	-66.0	-42.3	-68.4	-30.2	-15.8	-35.9	-26.5	Phase	-44.7				
	0.1	0.2	0.3	0.4	0.1	0.3	0.2	0.5	0.4	0.3	0.3	0.2	0.4	0.2	0.3	0.2	Ampl.	0.3				
	189.2	114.5	138.2	129.6	18.4	109.7	189.3	129.4	129.0	194.5	128.1	84.8	128.7	177.2	71.2	130.0	Sbd box	129.0				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
o	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					
o: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					
o: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					
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.03568590698E+03														Apriori delay (usec)	-1.03568767078E+03	Resid mbdelay (usec)	1.76380E-03	+/-	1.2E-04
Sband delay (usec)			-1.03568795728E+03														Apriori clock (usec)	4.6840887E+00	Resid sbdelay (usec)	-2.86500E-04	+/-	1.8E-03
Phase delay (usec)			-1.03568767222E+03														Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-1.44110E-06	+/-	4.0E-07
Delay rate (us/s)			1.40595322754E-01														Apriori rate (us/s)	1.40595310832E-01	Resid rate (us/s)	1.19222E-08	+/-	3.8E-09
Total phase (deg)																	Apriori accel (us/s/s)	8.35791594638E-06	Resid phase (deg)	-44.7	+/-	12.3

ph/seg (deg) 17.4 20.3 Amplitude 0.256 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 32.7 35.5 Search (1024X64) 0.242 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.5 24.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 38.3 42.8 Inc. seg. avg. 0.253 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 o: az 79.8 el 63.9 pa -79.7 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -1004.646 796.987 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/op..130MEY Output file: /Exps/c192c/v2/1234/No0072/op.W.326.130MEY simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, op VLBA_OV - VLBA_PT, fgroup W, pol RR

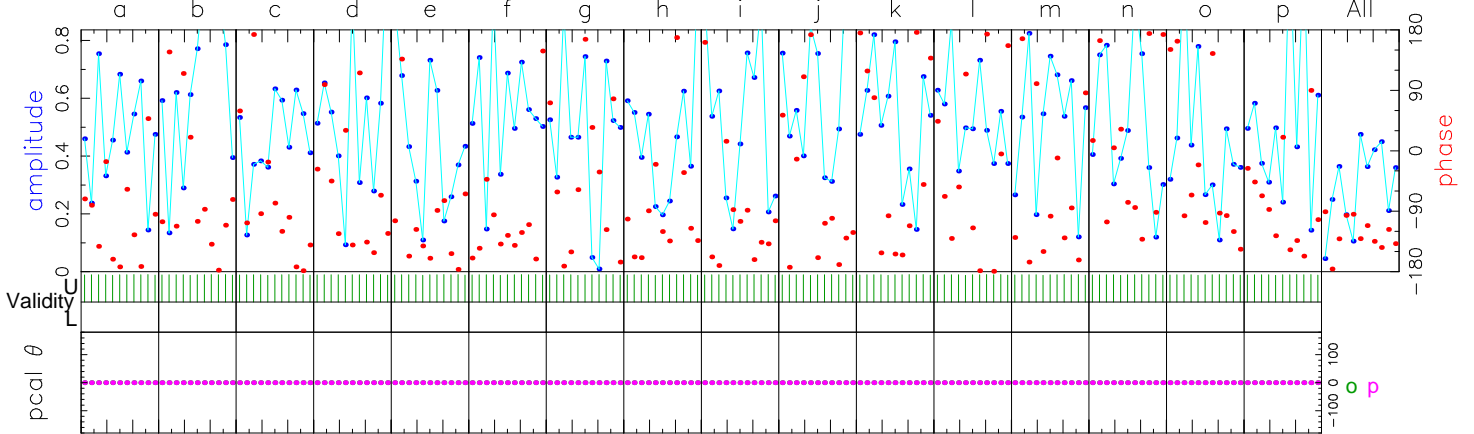


Fringe quality 9

SNR 10.2
 Int time 178.084
 Amp 0.279
 Phase -130.4
 PFD 5.1e-16
 Delays (us)
 SBD -0.000175
 MBD -0.000194
 Fringe rate (Hz) 0.000820
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054449
 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

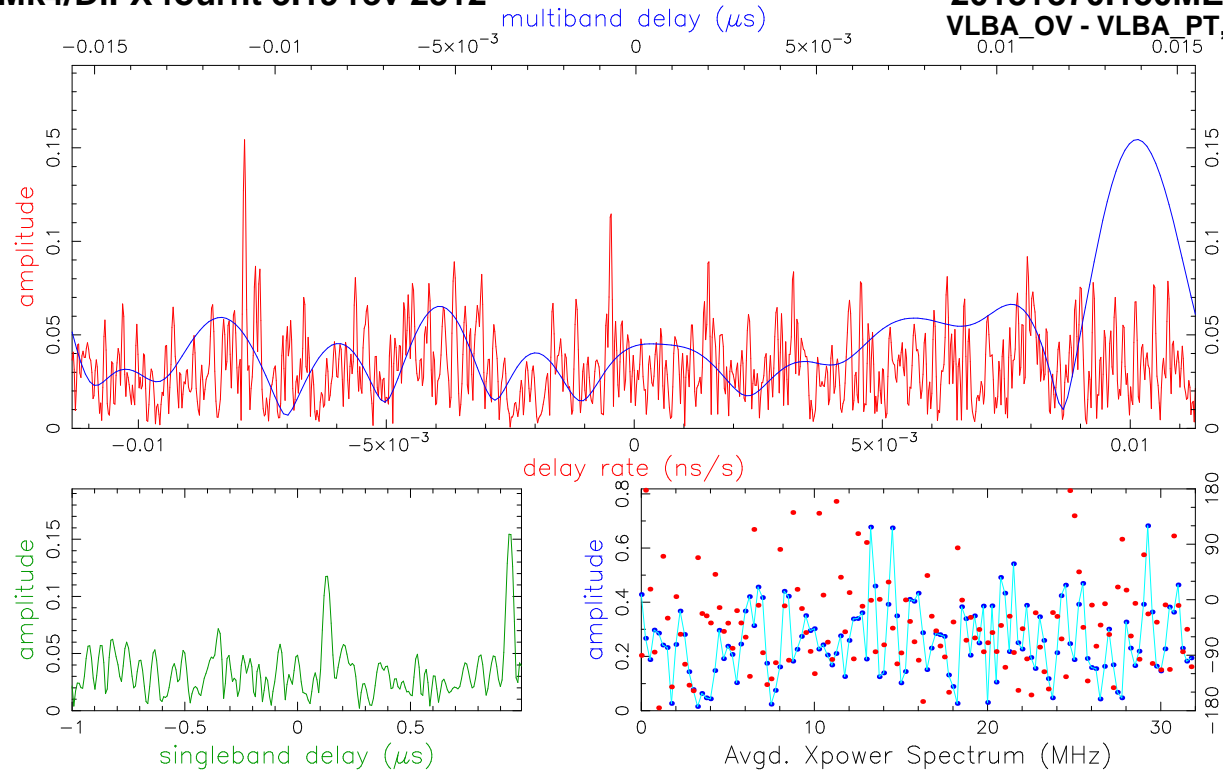


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-124.9	-116.4	-127.2	-116.6	-133.4	-133.4	-164.3	-120.0	-143.4	-150.4	-170.7	-148.1	-135.0	-111.2	-107.1	-113.3	Phase	-130.4				
	0.3	0.4	0.2	0.3	0.3	0.5	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	Ampl.	0.3				
	232.0	128.2	177.8	172.6	116.4	129.8	47.3	226.0	128.7	84.8	80.2	214.9	7.3	68.3	90.3	134.7	Sbd box	129.0				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
o	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					
o: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					
o: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					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.03568786487E+03														Apriori delay (usec)	-1.03568767078E+03	Resid mbdelay (usec)	-1.94094E-04	+/-	1.1E-04
Sband delay (usec)			-1.03568784528E+03														Apriori clock (usec)	4.6840887E+00	Resid sbdelay (usec)	-1.74500E-04	+/-	1.7E-03
Phase delay (usec)			-1.03568767498E+03														Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-4.20634E-06	+/-	3.6E-07
Delay rate (us/s)			1.40595320352E-01														Apriori rate (us/s)	1.40595310832E-01	Resid rate (us/s)	9.52018E-09	+/-	3.5E-09
Total phase (deg)					-116.3												Apriori accel (us/s/s)	8.35791594638E-06	Resid phase (deg)	-130.4	+/-	11.3

ph/seg (deg) 25.0 18.7 Theor. Amplitude 0.279 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.0 32.6 Search (1024X64) 0.267 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.7 22.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 30.4 39.3 Inc. seg. avg. 0.281 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 o: az 79.8 el 63.9 pa -79.7 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -1004.646 796.987 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/op..130MEY Output file: /Exps/c192c/v2/1234/No0072/op.W.346.130MEY simultaneous interpolator

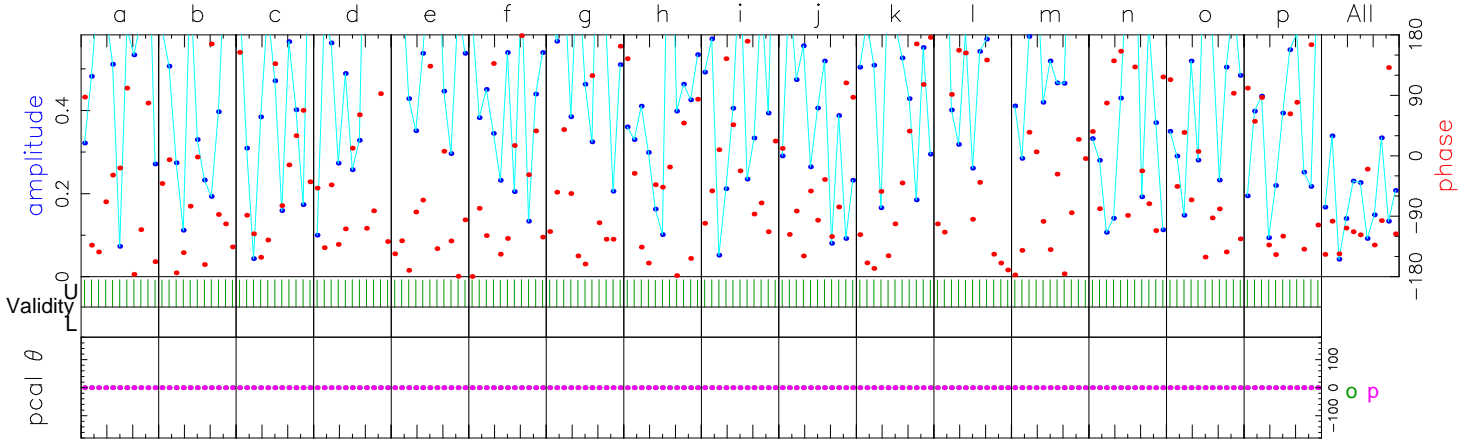
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, op
VLBA_OV - VLBA_PT, fgroup W, pol LR



Fringe quality 0
SNR 5.8
Int time 178.084
Amp 0.194
Phase -113.9
PFD 6.5e-01
Delays (us)
SBD 0.941366
MBD 0.013933
Fringe rate (Hz)
-0.678486
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054451
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

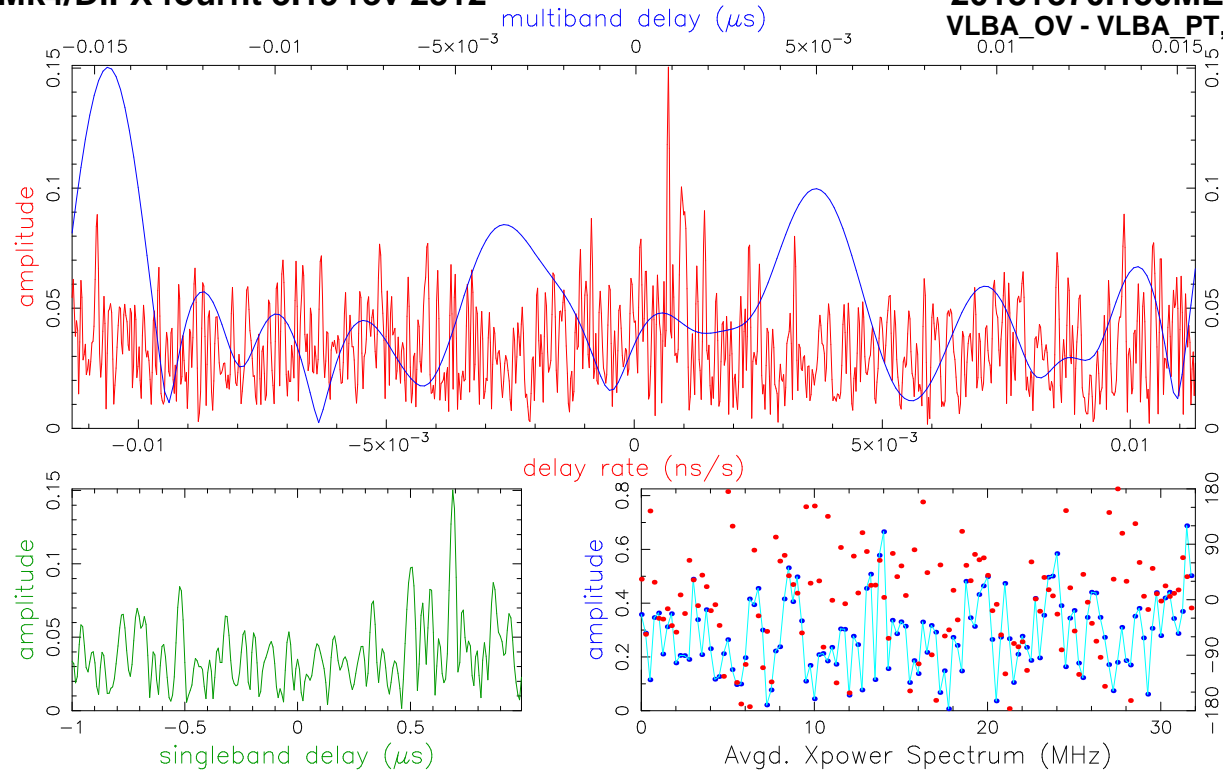


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-153.4	-93.3	-86.5	-103.7	-136.6	-144.2	-118.4	-30.3	-41.7	-86.8	-142.9	-150.6	-39.4	-131.2	-116.8	122.7		Phase -113.9					
	0.1	0.4	0.1	0.3	0.4	0.2	0.3	0.0	0.3	0.3	0.3	0.5	0.2	0.1	0.2	0.1		Ampl. 0.2					
	39.4	14.9	144.7	210.0	13.2	177.8	64.0	212.1	251.0	129.2	149.8	53.6	152.5	166.0	83.8	255.6		Sbd box 249.5					
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
o	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					
o: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					
o: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							
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-1.03473623792E+03															Apriori delay (usec)	-1.03568767078E+03	Resid mbdelay (usec)	1.39329E-02	+/-	1.9E-04
Sband delay (usec)			-1.03474630428E+03															Apriori clock (usec)	4.6840887E+00	Resid sbdelay (usec)	9.41366E-01	+/-	3.0E-03
Phase delay (usec)			-1.03568767445E+03															Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-3.67141E-06	+/-	6.4E-07
Delay rate (us/s)			1.40587434280E-01															Apriori rate (us/s)	1.40595310832E-01	Resid rate (us/s)	-7.87655E-06	+/-	6.2E-09
Total phase (deg)																		Apriori accel (us/s/s)	8.35791594638E-06	Resid phase (deg)	-113.9	+/-	19.9

ph/seg (deg) 47.9 33.0 Search (1024X64) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 59.0 57.6 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 39.8 Inc. seg. avg. 0.198 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 67.5 69.5 Inc. frq. avg. 0.196 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 79.8 el 63.9 pa -79.7 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -1004.646 796.987 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/op..130MEY Output file: /Exps/c192c/v2/1234/No0072/op.W.364.130MEY

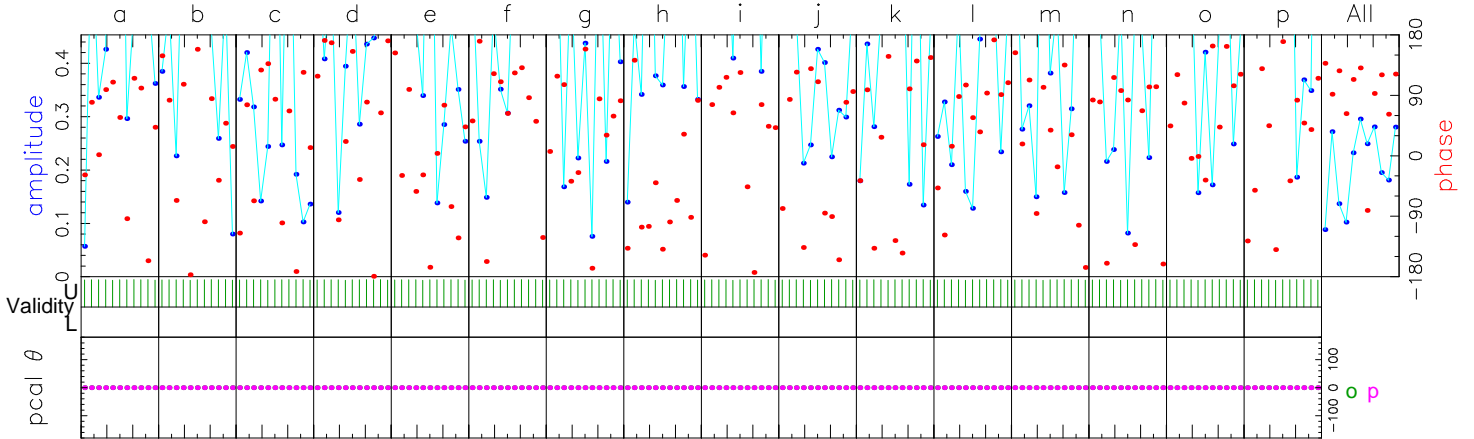
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, op
VLBA_OV - VLBA_PT, fgroup W, pol RL



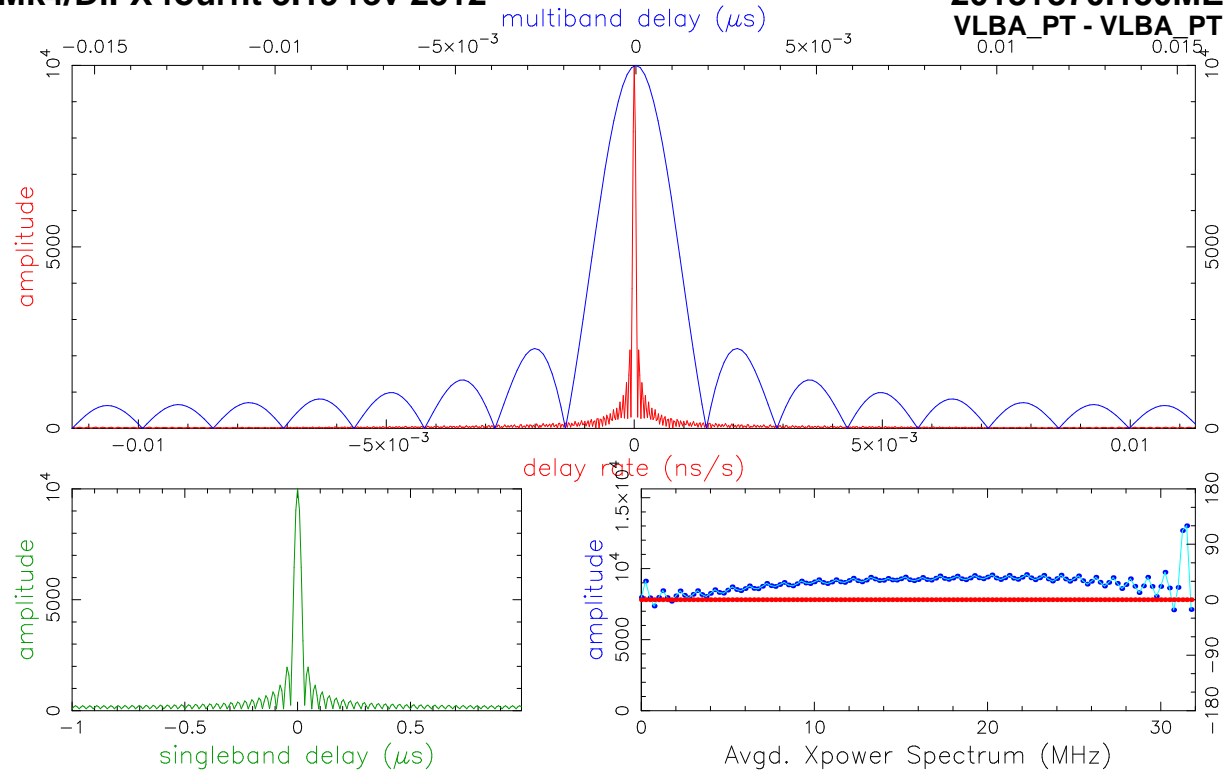
Fringe quality 0
SNR 5.5
Int time 178.084
Amp 0.151
Phase 108.5
PFD 9.9e-01
Delays (us)
SBD 0.688815
MBD -0.014616
Fringe rate (Hz)
0.059424
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054453
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



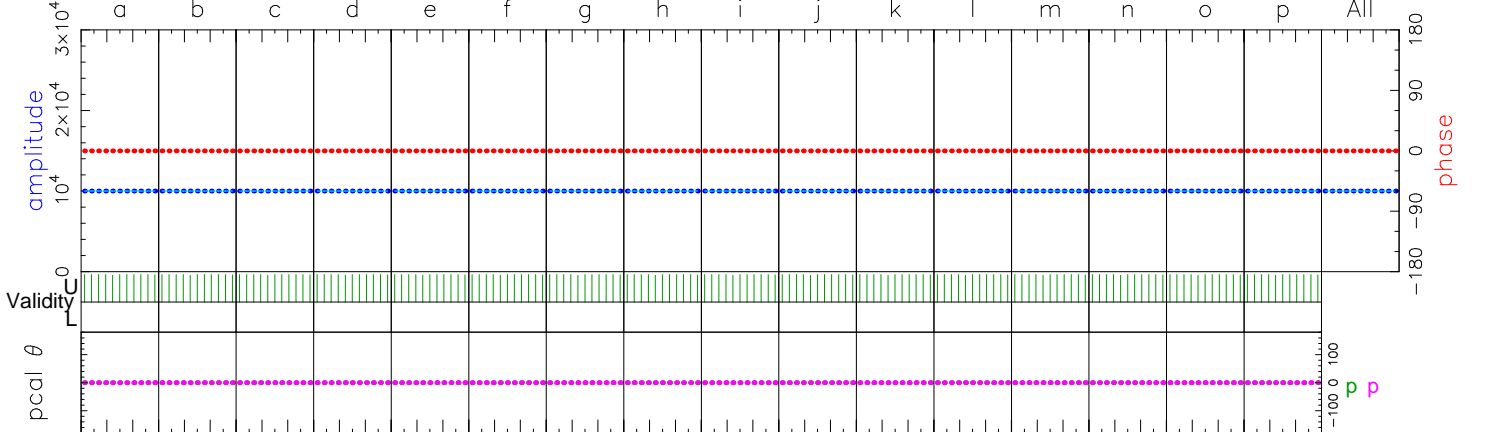
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All								
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used							
o	1000	1000	1000	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	1000	1000	1000	PC phase						
o: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	0:0	0:0	0:0	Mani PC						
o: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	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	1000	1000	1000							
o	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)		-1.03498353664E+03																		Apriori delay (usec)	-1.03568767078E+03	Resid mbdelay (usec)	-1.46159E-02	+/-	2.0E-04	
Sband delay (usec)		-1.03499885528E+03																			Apriori clock (usec)	4.6840887E+00	Resid sbdelay (usec)	6.88815E-01	+/-	3.1E-03
Phase delay (usec)		-1.03568766728E+03																			Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	3.50030E-06	+/-	6.7E-07
Delay rate (us/s)		1.40596000682E-01																			Apriori rate (us/s)	1.40595310832E-01	Resid rate (us/s)	6.89850E-07	+/-	6.4E-09
Total phase (deg)					-237.3																Apriori accel (us/s/s)	8.35791594638E-06	Resid phase (deg)	108.5	+/-	20.8

ph/seg (deg) 57.1 34.5 Search (1024X64) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 61.6 60.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 63.3 41.6 Inc. seg. avg. 0.178 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 73.9 72.6 Inc. frq. avg. 0.168 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 79.8 el 63.9 pa -79.7 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) -1004.646 796.987 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/op..130MEY Output file: /Exps/c192c/v2/1234/No0072/op.W.377.130MEY



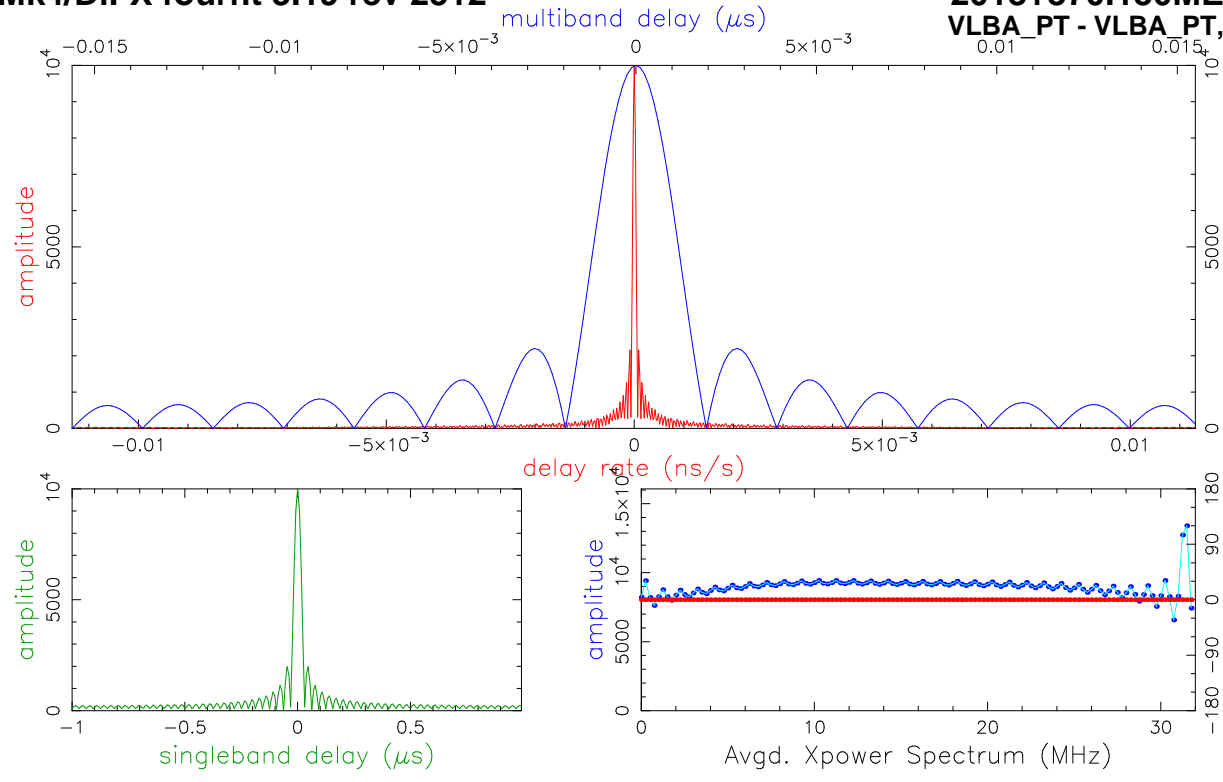
Fringe quality 9
SNR 366275.8
Int time 179.399
Amp 10000.002
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054447
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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p: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		
p: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		
p	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		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)	0.0000000000E+00			Apriori delay (usec)			0.0000000000E+00			Resid mbdelay (usec)			0.00000E+00			+/-	2.9E-09	
Sband delay (usec)	0.0000000000E+00			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			0.00000E+00			+/-	4.7E-08	
Phase delay (usec)	-7.57607704455E-20			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			-7.57608E-20			+/-	1.0E-11	
Delay rate (us/s)	0.0000000000E+00			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			0.00000E+00			+/-	9.7E-14	
Total phase (deg)	-0.0			Apriori accel (us/s/s)			0.0000000000E+00			Resid phase (deg)			-0.0			+/-	0.0	

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.002 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X64) 10000.003 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 p: az 74.3 el 71.3 pa -91.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/pp..130MEY Output file: /Exps/c192c/v2/1234/No0072/pp.W.325.130MEY simultaneous interpolator

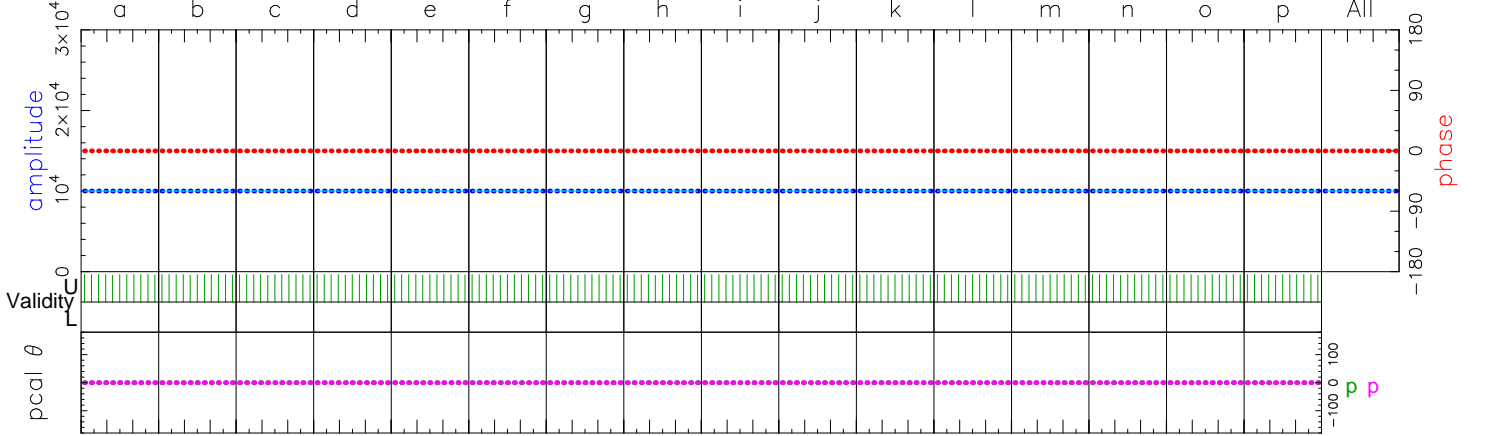


Fringe quality 9

SNR 366275.6
Int time 179.399
Amp 10000.001
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054449
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

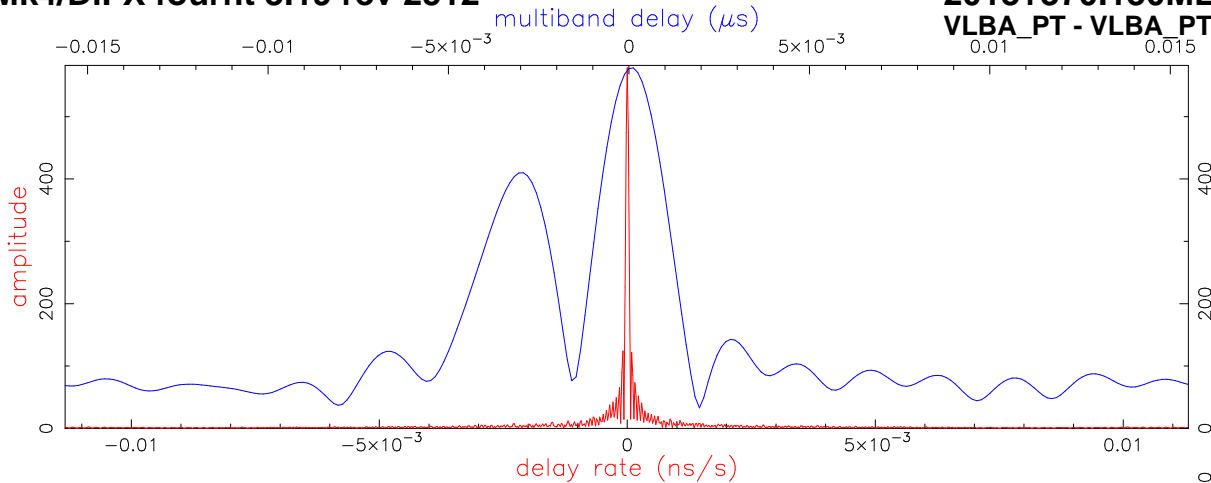


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p: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		
p: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		
p	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		
p	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)	0.0000000000E+00			Apriori delay (usec)			0.0000000000E+00			Resid mbdelay (usec)			0.00000E+00			+/-	2.9E-09	
Sband delay (usec)	0.0000000000E+00			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			0.00000E+00			+/-	4.7E-08	
Phase delay (usec)	-7.35399105718E-20			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			-7.35399E-20			+/-	1.0E-11	
Delay rate (us/s)	0.0000000000E+00			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			0.00000E+00			+/-	9.7E-14	
Total phase (deg)	-0.0			Apriori accel (us/s/s)			0.0000000000E+00			Resid phase (deg)			-0.0			+/-	0.0	

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X64) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 p: az 74.3 el 71.3 pa -91.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/pp..130MEY Output file: /Exps/c192c/v2/1234/No0072/pp.W.342.130MEY simultaneous interpolator

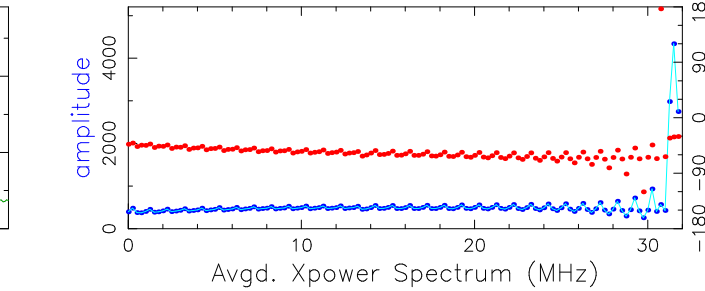
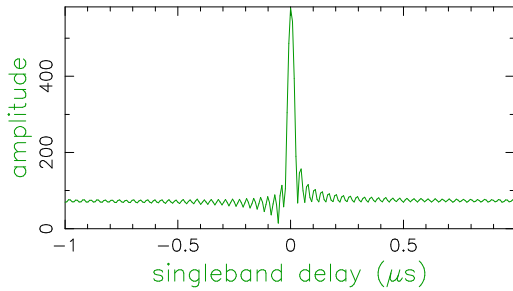
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, pp
VLBA_PT - VLBA_PT, fgroup W, pol LR



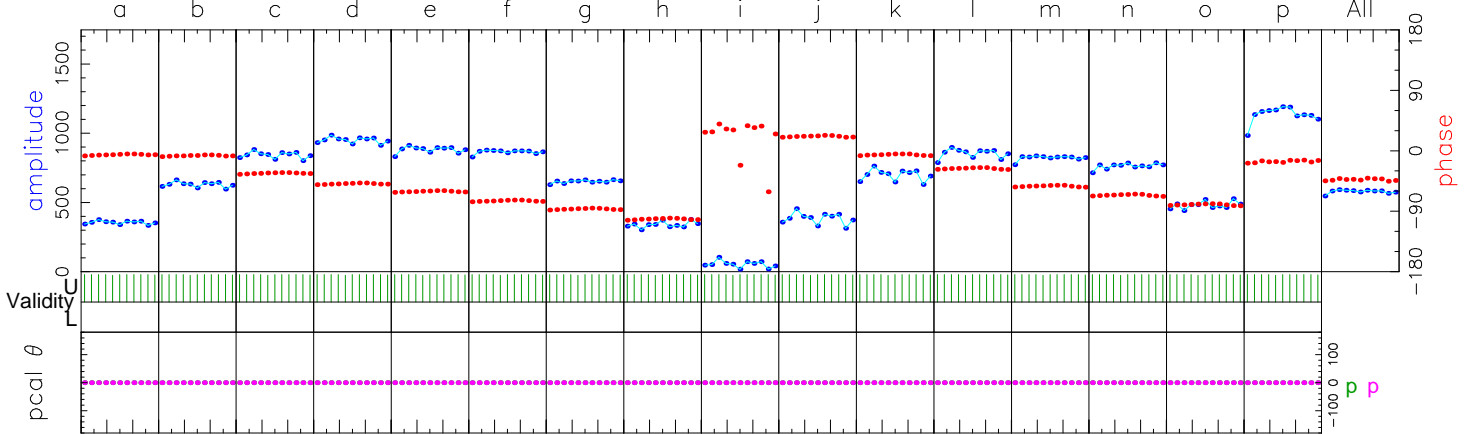
Fringe quality 5

SNR 21326.0
Int time 179.399
Amp 582.238
Phase -42.9
PFD 0.0e+00
Delays (us)
SBD 0.001828
MBD 0.000060
Fringe rate (Hz)
-0.000068
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054451
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

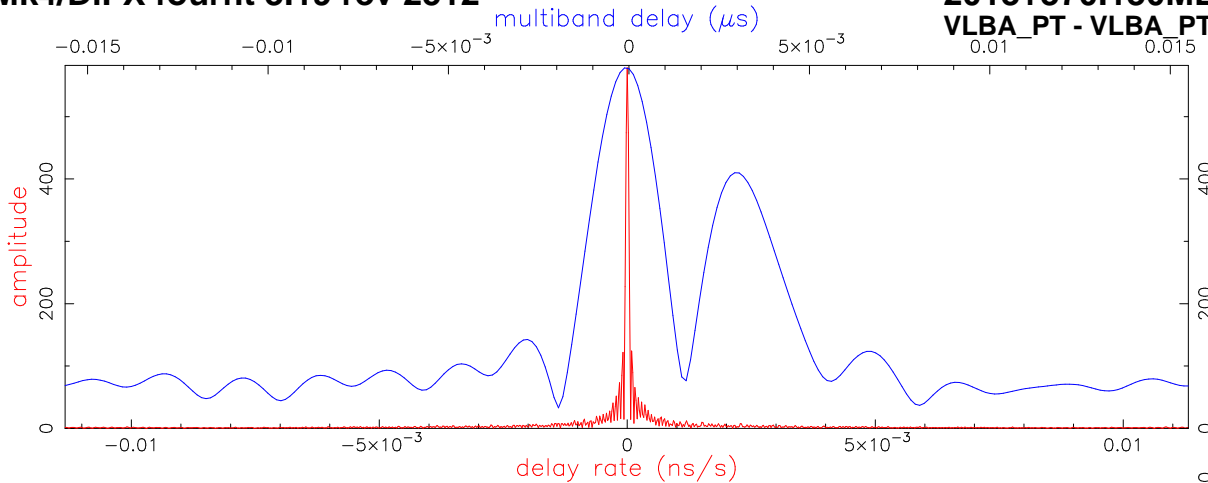


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-5.9	-7.3	-33.4	-49.1	-60.5	-74.5	-86.7	-101.6	30.2	21.5	-5.9	-26.4	-52.7	-66.1	-80.2	-15.8		Phase	-42.9
	356.0	630.0	842.8	950.1	881.5	865.3	651.0	339.7	52.1	385.4	698.2	854.4	822.1	762.3	481.2	1133.9		Ampl.	669.1
	128.7	128.8	128.7	129.1	128.8	128.8	128.7	128.7	131.4	128.8	128.7	128.8	128.6	128.9	128.8	130.3		Sbd box	129.2
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	
p	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	
p: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	
p: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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
p	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)	5.98437500000E-05			Apriori delay (usec)			0.00000000000E+00			Resid mbdelay (usec)			5.98438E-05			+/- 5.1E-08			
Sband delay (usec)	1.82850000000E-03			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			1.82850E-03			+/- 8.1E-07			
Phase delay (usec)	-1.38354795749E-06			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			-1.38355E-06			+/- 1.7E-10			
Delay rate (us/s)	-7.95001649174E-10			Apriori rate (us/s)			0.00000000000E+00			Resid rate (us/s)			-7.95002E-10			+/- 1.7E-12			
Total phase (deg)	-42.9			Apriori accel (us/s/s)			0.00000000000E+00			Resid phase (deg)			-42.9			+/- 0.0			

ph/seg (deg) 1.4 0.0 Search (1024X64) 576.903 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 2.2 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 40.8 0.0 Inc. seg. avg. 578.782 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 49.0 0.0 Inc. frq. avg. 669.120 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
p: az 74.3 el 71.3 pa -91.8 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/pp..130MEY Output file: /Exps/c192c/v2/1234/No0072/pp.W.361.130MEY

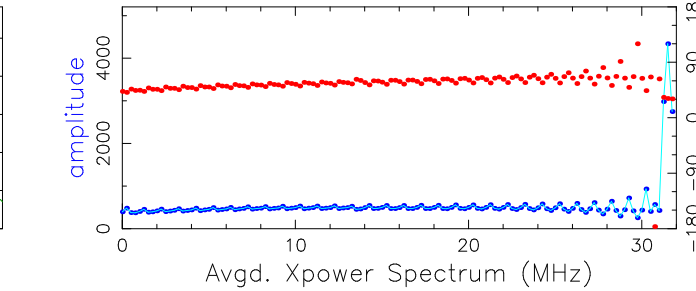
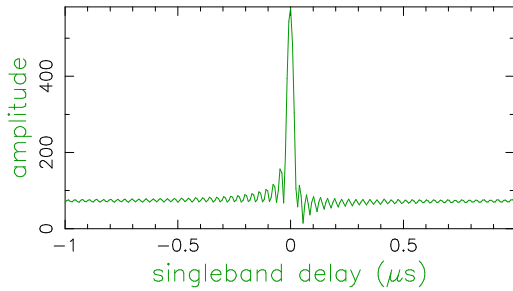
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, pp
VLBA_PT - VLBA_PT, fgroup W, pol RL



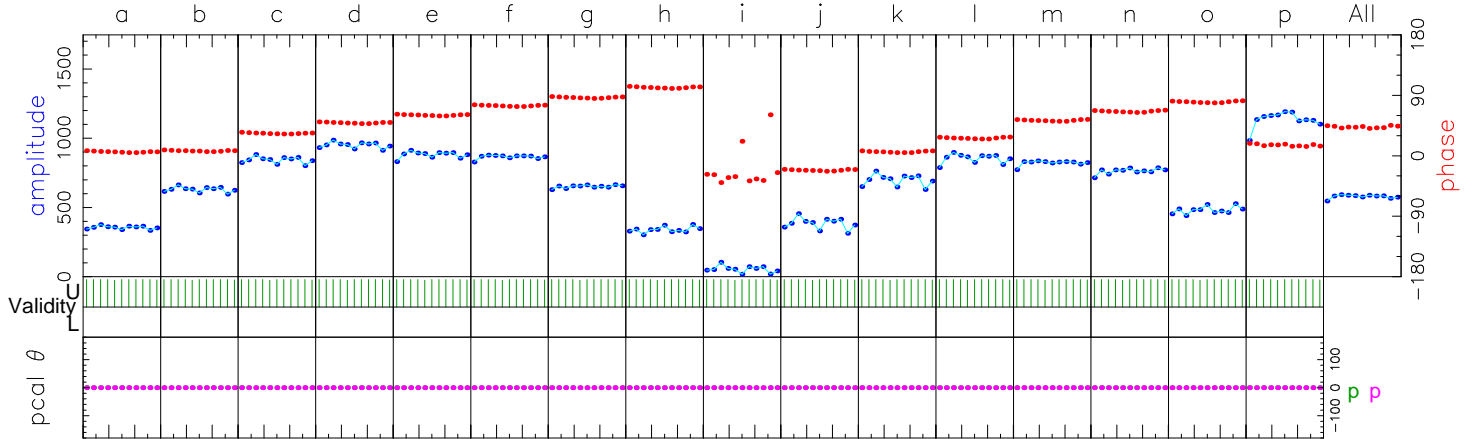
Fringe quality 5

SNR 21326.0
Int time 179.399
Amp 582.238
Phase 42.9
PFD 0.0e+00
Delays (us)
SBD -0.001828
MBD -0.000060
Fringe rate (Hz)
0.000068
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192c
Yr:day 16383
Start 2019:279
Stop 2019:279
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054453
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

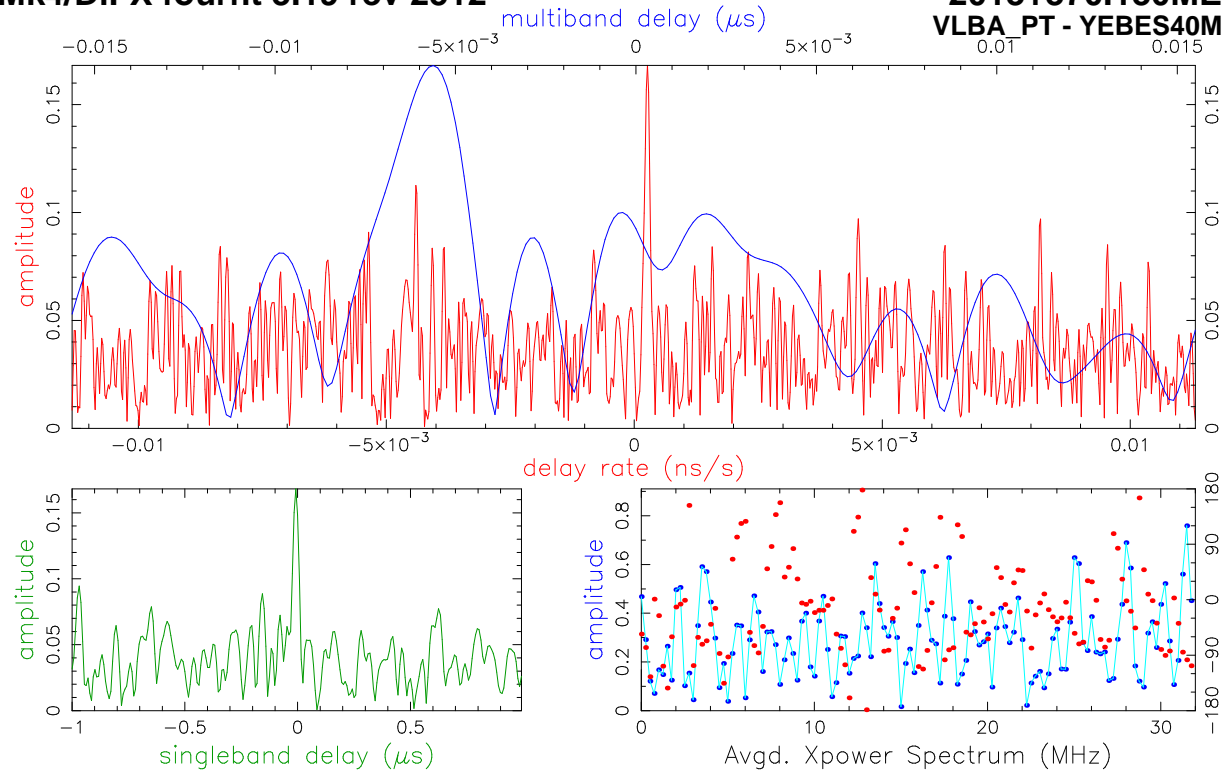
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	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	
5.9	7.3	33.4	49.1	60.5	74.5	86.7	101.6	-30.2	-21.5	5.9	26.4	52.7	66.1	80.2	15.8		Phase	42.9	
356.0	630.0	842.8	950.1	881.5	865.3	651.0	339.7	52.1	385.4	698.2	854.4	822.1	762.3	481.2	1133.9		Ampl.	669.1	
129.3	129.2	129.3	128.9	129.2	129.2	129.3	129.3	126.6	129.2	129.3	129.2	129.4	129.1	129.2	127.7		Sbd box	128.8	
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		APs used		
p	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		PC phase		
p: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		ManI PC		
p	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				
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		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)			-5.984375000000E-05						Apriori delay (usec)	0.000000000000E+00							Resid mbdelay (usec)	-5.98438E-05	+/- 5.1E-08
Sband delay (usec)			-1.828500000000E-03						Apriori clock (usec)	0.000000000000E+00							Resid sbdelay (usec)	-1.82850E-03	+/- 8.1E-07
Phase delay (usec)			1.38354795737E-06						Apriori clockrate (us/s)	0.000000000000E+00							Resid phdelay (usec)	1.38355E-06	+/- 1.7E-10
Delay rate (us/s)			7.95001649174E-10						Apriori rate (us/s)	0.000000000000E+00							Resid rate (us/s)	7.95002E-10	+/- 1.7E-12
Total phase (deg)			42.9						Apriori accel (us/s/s)	0.000000000000E+00							Resid phase (deg)	42.9	+/- 0.0

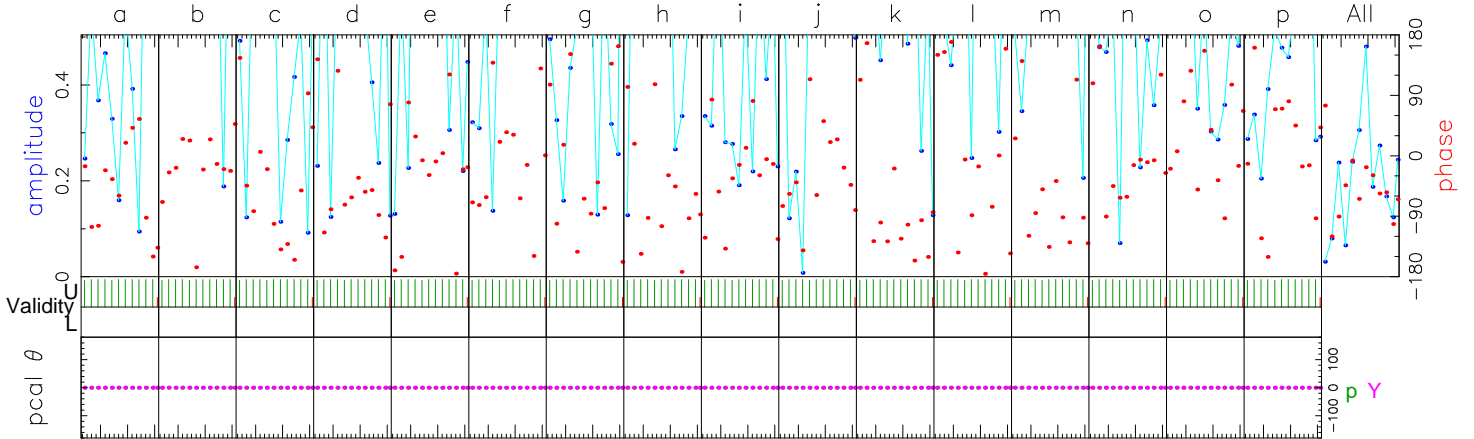
ph/seg (deg) 1.4 0.0 Theor. Amplitude 582.238 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 2.2 0.0 Search (1024X64) 576.904 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 49.0 0.0 Inc. seg. avg. 578.783 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 p: az 74.3 el 71.3 pa -91.8 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
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/pp..130MEY Output file: /Exps/c192c/v2/1234/No0072/pp.W.376.130MEY



Fringe quality 0
SNR 5.8
Int time 161.794
Amp 0.168
Phase -48.4
PFD 4.7e-01
Delays (us)
SBD -0.007962
MBD -0.005625
Fringe rate (Hz) 0.023197
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010016.90
Stop 010259.71
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054448
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

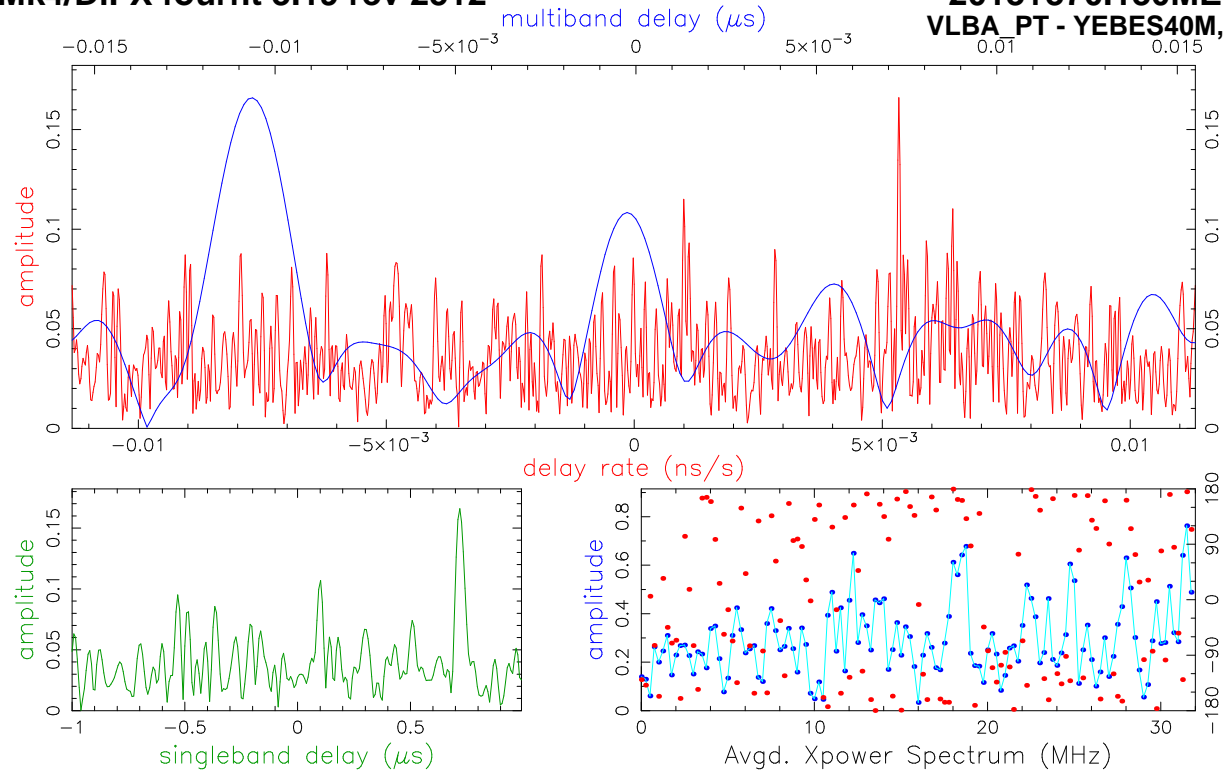
Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	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
	-78.6	-9.1	-67.4	-84.2	5.6	-1.1	-118.7	-75.5	-23.9	-17.0	-136.0	-147.6	-99.1	-25.6	39.1	20.7	Phase	-48.4
	0.2	0.5	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
	71.1	127.7	91.5	34.0	92.8	119.0	38.5	130.0	65.6	46.5	129.0	80.8	101.9	243.7	191.5	126.0	Sbd box	128.0
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p: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	
p: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	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 1.01995849852E+04 Apriori delay (usec) 1.01995906100E+04 Resid mbdelay (usec) -5.62477E-03 +/- 1.8E-04
Sband delay (usec) 1.01995826485E+04 Apriori clock (usec) 2.3017664E+00 Resid sbdelay (usec) -7.96150E-03 +/- 2.9E-03
Phase delay (usec) 1.01995906084E+04 Apriori clockrate (us/s) -1.6113413E-08 Resid phdelay (usec) -1.56044E-06 +/- 6.3E-07
Delay rate (us/s) 1.32159678713E+00 Apriori rate (us/s) 1.32159651784E+00 Resid rate (us/s) 2.69294E-07 +/- 6.7E-09
Total phase (deg) 2.8 Apriori accel (us/s/s) -6.01034656196E-05 Resid phase (deg) -48.4 +/- 19.6

RMS Theor. Amplitude 0.168 +/- 0.029
ph/seg (deg) 49.8 33.9 Search (1024X64) 0.164 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 74.7 59.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 59.5 39.2 Inc. seg. avg. 0.171 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 80.8 68.4 Inc. frq. avg. 0.221 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
p: az 74.3 el 71.3 pa -91.8 Y: az 296.3 el 28.3 pa 59.0 u,v (fr/asec) -9555.110 -4140.627 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/pY..130MEY Output file: /Exps/c192c/v2/1234/No0072/pY.W.333.130MEY simultaneous interpolator

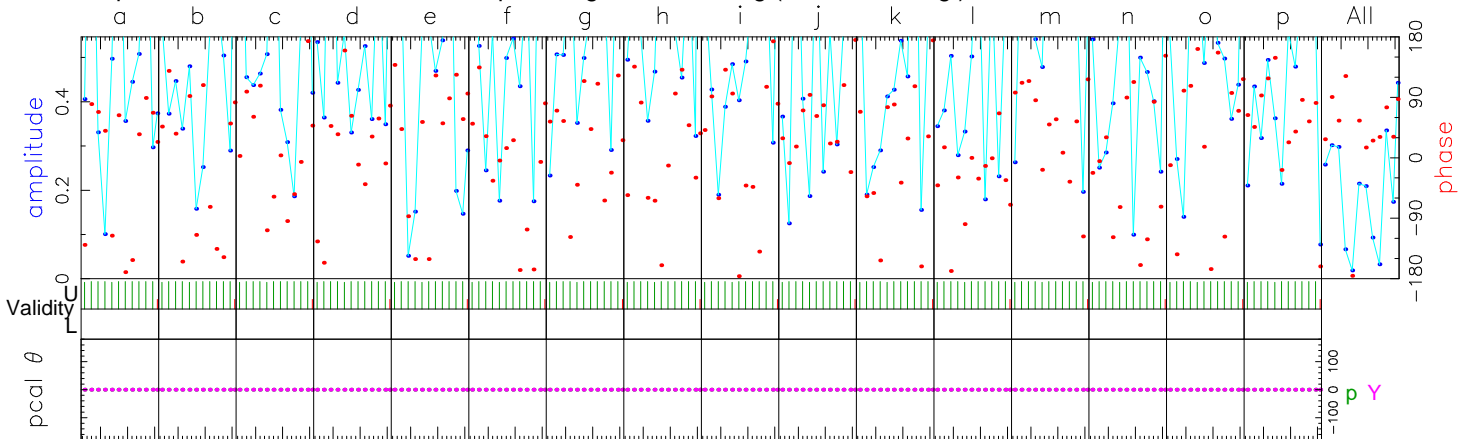


Fringe quality 0

SNR 5.8
Int time 161.794
Amp 0.182
Phase 57.2
PFD 6.1e-01
Delays (us)
SBD 0.718086
MBD -0.010643
Fringe rate (Hz) 0.459780
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010016.90
Stop 010259.71
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054450
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

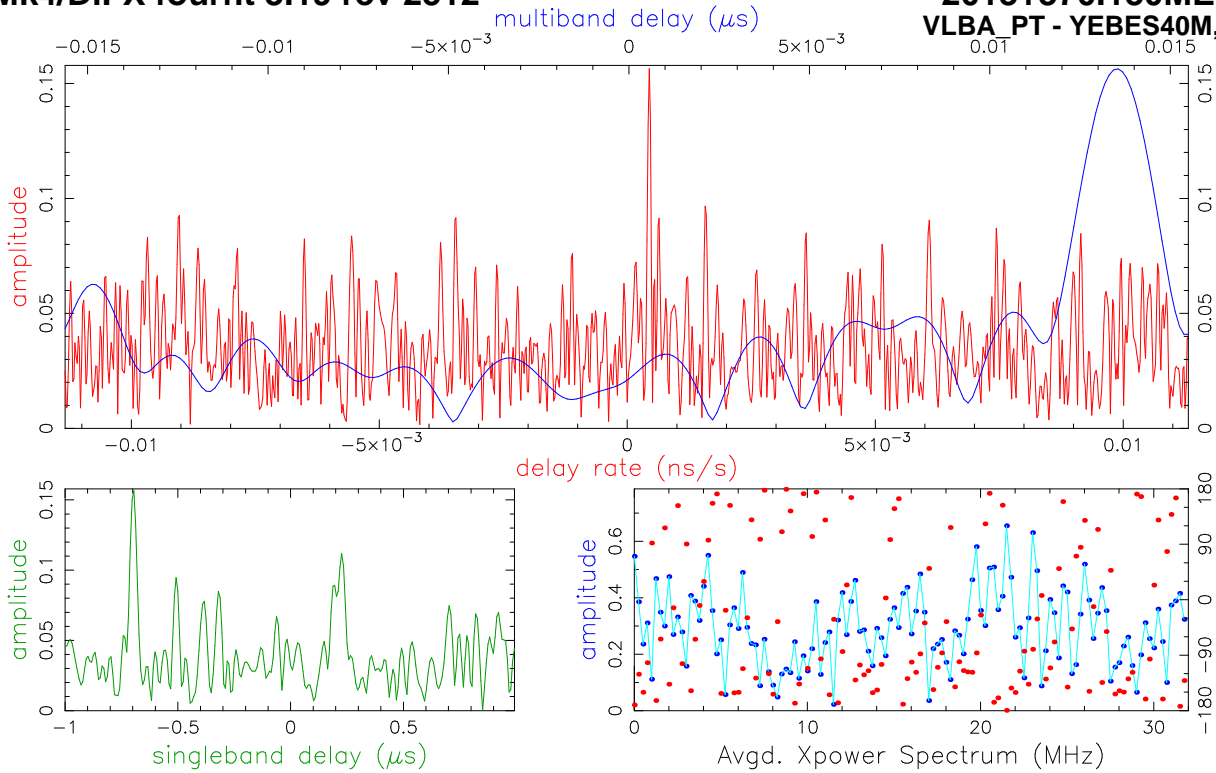


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	83.8	122.7	-13.0	38.7	96.0	17.8	69.0	55.2	100.8	40.9	65.9	-27.4	58.3	-78.1	136.5	69.0	Phase	57.2
	0.3	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.4	0.2	0.3	0.4	0.0	0.2	0.4	Ampl.	0.2
	181.2	26.9	10.4	196.7	43.4	79.8	28.8	209.2	217.8	221.5	71.8	62.2	120.0	19.8	194.9	123.6	Sbd box	220.9
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
p	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	
p: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	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 1.02002987171E+04 Apriori delay (usec) 1.01995906100E+04 Resid mbdelay (usec) -1.06429E-02 +/- 1.9E-04
 Sband delay (usec) 1.02003086955E+04 Apriori clock (usec) 2.3017664E+00 Resid sbdelay (usec) 7.18086E-01 +/- 3.0E-03
 Phase delay (usec) 1.01995906118E+04 Apriori clockrate (us/s) -1.6113413E-08 Resid phdelay (usec) 1.84471E-06 +/- 6.4E-07
 Delay rate (us/s) 1.32160185543E+00 Apriori rate (us/s) 1.32159651784E+00 Resid rate (us/s) 5.33759E-06 +/- 6.8E-09
 Total phase (deg) 108.4 Apriori accel (us/s/s) -6.01034656196E-05 Resid phase (deg) 57.2 +/- 19.8

RMS Theor. Amplitude 0.182 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 48.5 34.4 Search (1024X64) 0.162 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 71.2 60.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 58.3 39.7 Inc. seg. avg. 0.177 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 67.3 69.2 Inc. frq. avg. 0.194 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

p: az 74.3 el 71.3 pa -91.8 Y: az 296.3 el 28.3 pa 59.0 u,v (fr/asec) -9555.110 -4140.627 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/pY..130MEY Output file: /Exps/c192c/v2/1234/No0072/pY.W.353.130MEY

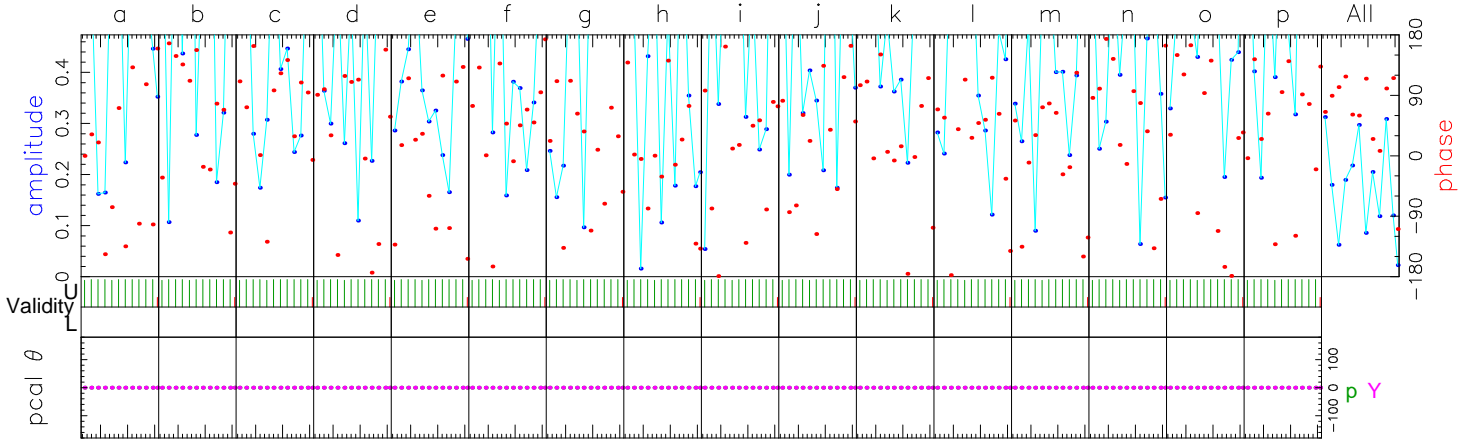


Fringe quality 0

SNR 5.5
Int time 161.794
Amp 0.158
Phase 75.7
PFD 9.9e-01
Delays (us)
SBD -0.697628
MBD 0.013510
Fringe rate (Hz) 0.037757
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010016.90
Stop 010259.71
FRT 010130.00
Corr/FF/build 2020:076:163344
2020:086:054452
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	
	-44.0	55.7	98.7	120.9	92.6	80.6	36.1	35.9	40.5	62.6	63.1	64.1	58.7	86.8	133.9	80.8	Phase	75.7	
	0.0	0.1	0.3	0.2	0.1	0.3	0.2	0.1	0.2	0.2	0.3	0.3	0.1	0.2	0.3	0.3	Ampl.	0.1	
	157.7	22.7	16.5	23.8	27.4	15.2	162.0	142.6	150.3	221.6	19.6	219.0	223.0	164.0	132.2	62.0	Sbd box	39.7	
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		
p	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		
p: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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

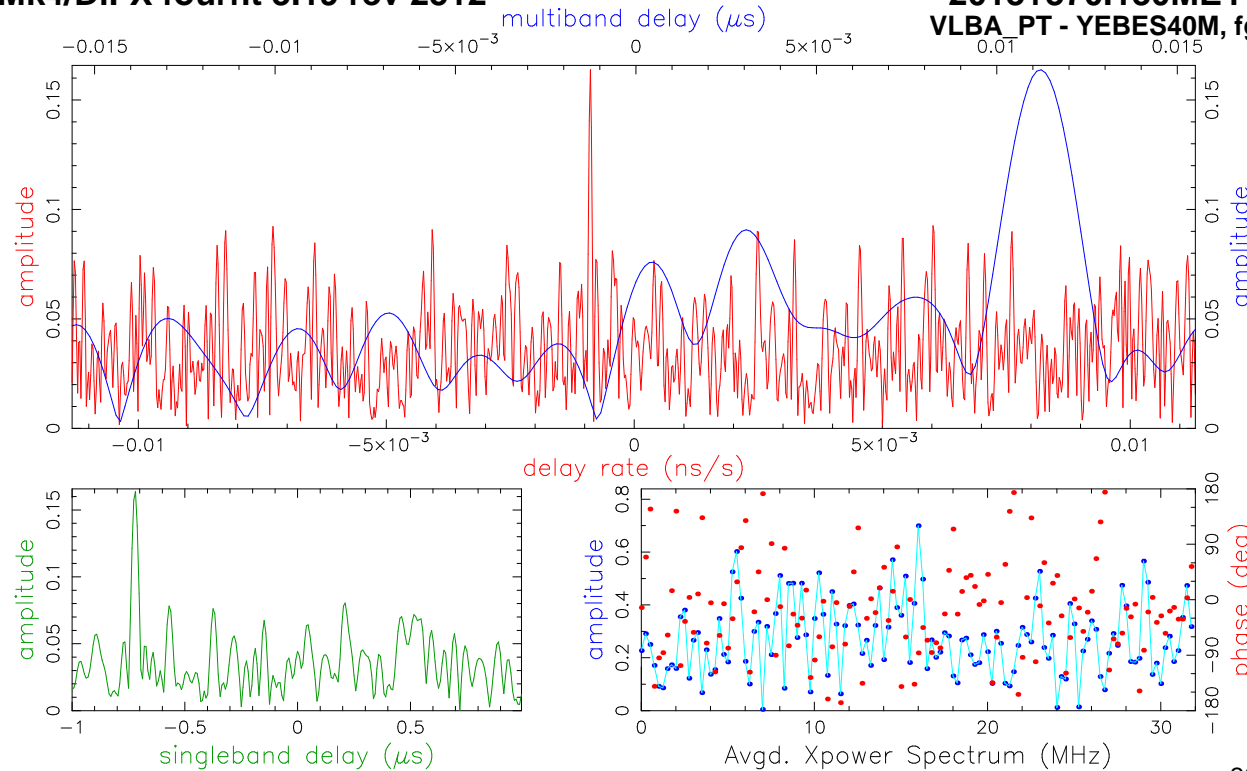
Group delay (usec)(sbd) 1.01988853701E+04 Apriori delay (usec) 1.01995906100E+04 Resid mbdelay (usec) 1.35101E-02 +/- 2.0E-04
 Sband delay (usec) 1.01988929820E+04 Apriori clock (usec) 2.3017664E+08 Resid sbdelay (usec) -6.97628E-01 +/- 3.1E-03
 Phase delay (usec) 1.01995906124E+04 Apriori clockrate (us/s) -1.6113413E-08 Resid phdelay (usec) 2.44201E-06 +/- 6.7E-07
 Delay rate (us/s) 1.32159695616E+00 Apriori rate (us/s) 1.32159651784E+00 Resid rate (us/s) 4.38322E-07 +/- 7.2E-09
 Total phase (deg) 127.0 Apriori accel (us/s/s) -6.01034656196E-05 Resid phase (deg) 75.7 +/- 20.9

RMS Theor. Amplitude 0.158 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 47.0 36.2 Search (1024X64) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 58.6 63.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 43.3 41.8 Inc. seg. avg. 0.154 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 50.9 72.9 Inc. frq. avg. 0.143 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

p: az 74.3 el 71.3 pa -91.8 Y: az 296.3 el 28.3 pa 59.0 u,v (fr/asec) -9555.110 -4140.627 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/pY..130MEY Output file: /Exps/c192c/v2/1234/No0072/pY.W.371.130MEY

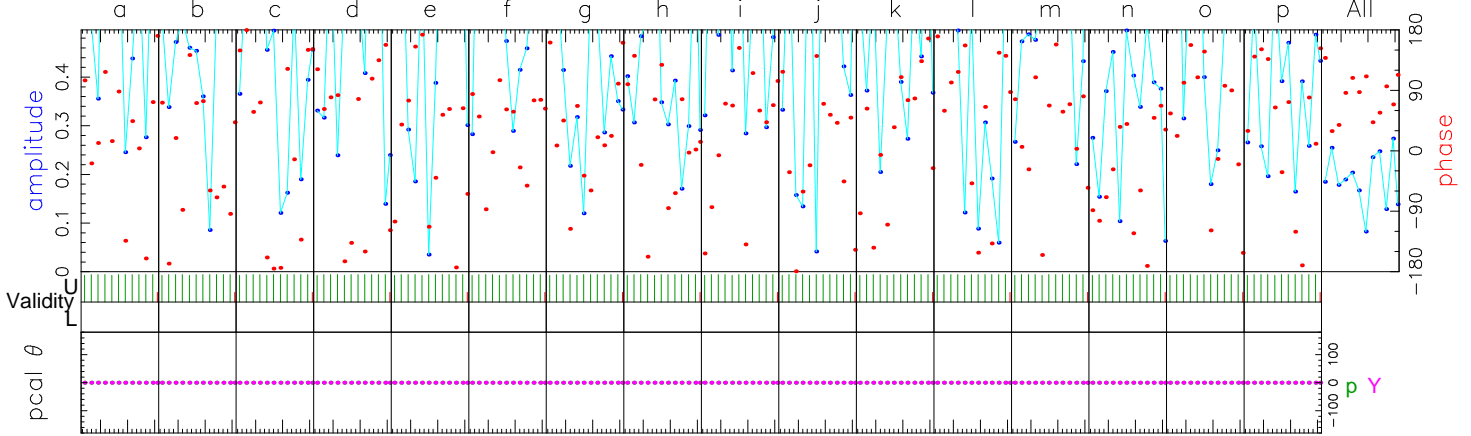
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, pY
VLBA_PT - YEBES40M, fgroup W, pol RL



Fringe quality 0
SNR 5.8
Int time 161.794
Amp 0.166
Phase 73.3
PFD 6.7e-01
Delays (us)
SBD -0.721120
MBD 0.011213
Fringe rate (Hz)
-0.075571
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 010016.90
Stop 010259.71
FRT 010130.00
Corr/FF/build
2020:076:163344
2020:086:054455
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
	67.0	-26.9	128.7	126.9	86.0	41.8	30.9	41.6	81.3	25.1	125.6	110.2	71.0	-37.8	79.9	87.4	Phase	73.3
	0.3	0.1	0.2	0.3	0.2	0.4	0.2	0.1	0.2	0.3	0.1	0.3	0.2	0.1	0.3	0.2	Ampl.	0.2
	38.6	190.2	109.7	159.6	156.9	36.6	19.6	125.1	222.6	126.2	231.9	154.0	9.4	201.2	60.2	241.8	Sbd box	36.7
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	
p	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	
p: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	
p: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		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

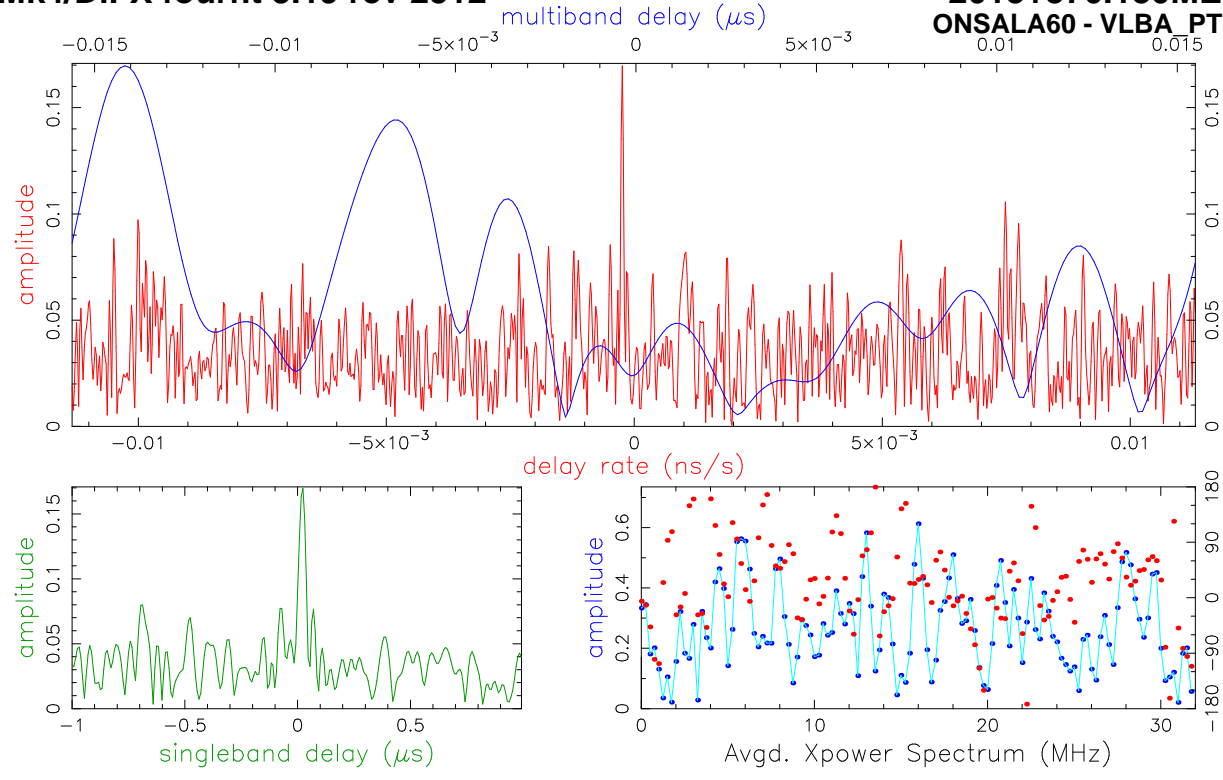
Group delay (usec)(sbd) 1.01988830733E+04 Apriori delay (usec) 1.01995906100E+04 Resid mbdelay (usec) 1.12133E-02 +/- 1.9E-04
 Sband delay (usec) 1.01988694900E+04 Apriori clock (usec) 2.3017664E+00 Resid sbdelay (usec) -7.21120E-01 +/- 3.0E-03
 Phase delay (usec) 1.01995906123E+04 Apriori clockrate (us/s) -1.6113413E-08 Resid phdelay (usec) 2.36231E-06 +/- 6.4E-07
 Delay rate (us/s) 1.32159564053E+00 Apriori rate (us/s) 1.32159651784E+00 Resid rate (us/s) -8.77306E-07 +/- 6.8E-09
 Total phase (deg) 124.5 Apriori accel (us/s/s) -6.01034656196E-05 Resid phase (deg) 73.3 +/- 19.9

ph/seg (deg) RMS Theor. Amplitude 0.166 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 33.3 34.5 Search (1024X64) 0.159 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.1 60.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.8 39.8 Inc. seg. avg. 0.164 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 58.0 69.5 Inc. frq. avg. 0.172 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

p: az 74.3 el 71.3 pa -91.8 Y: az 296.3 el 28.3 pa 59.0 u,v (fr/asec) -9555.110 -4140.627 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/pY..130MEY Output file: /Exps/c192c/v2/1234/No0072/pY.W.388.130MEY

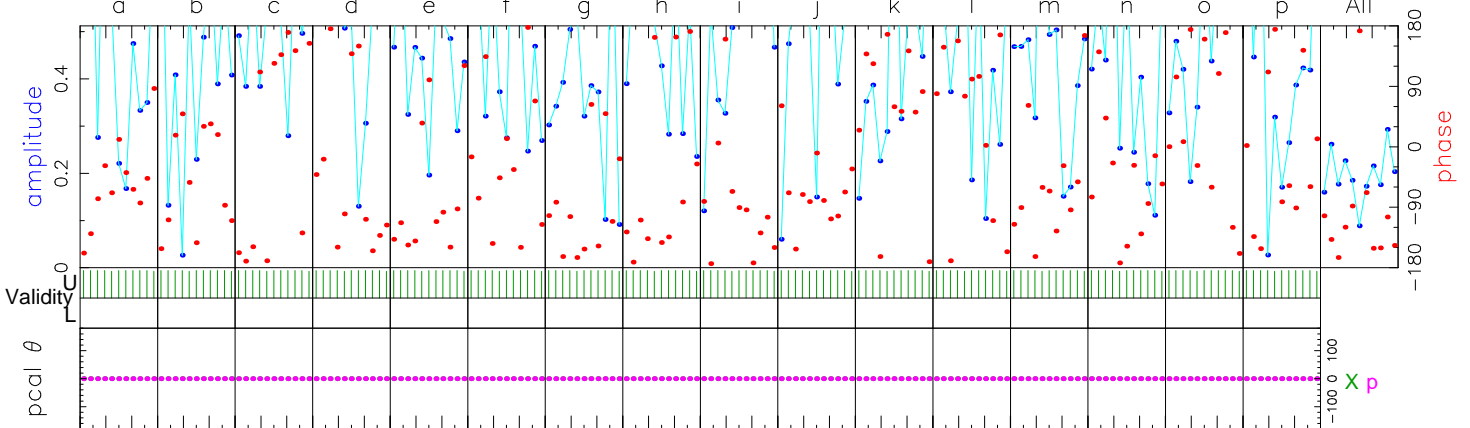
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, Xp
 ONSALA60 - VLBA_PT, fgroup W, pol LL



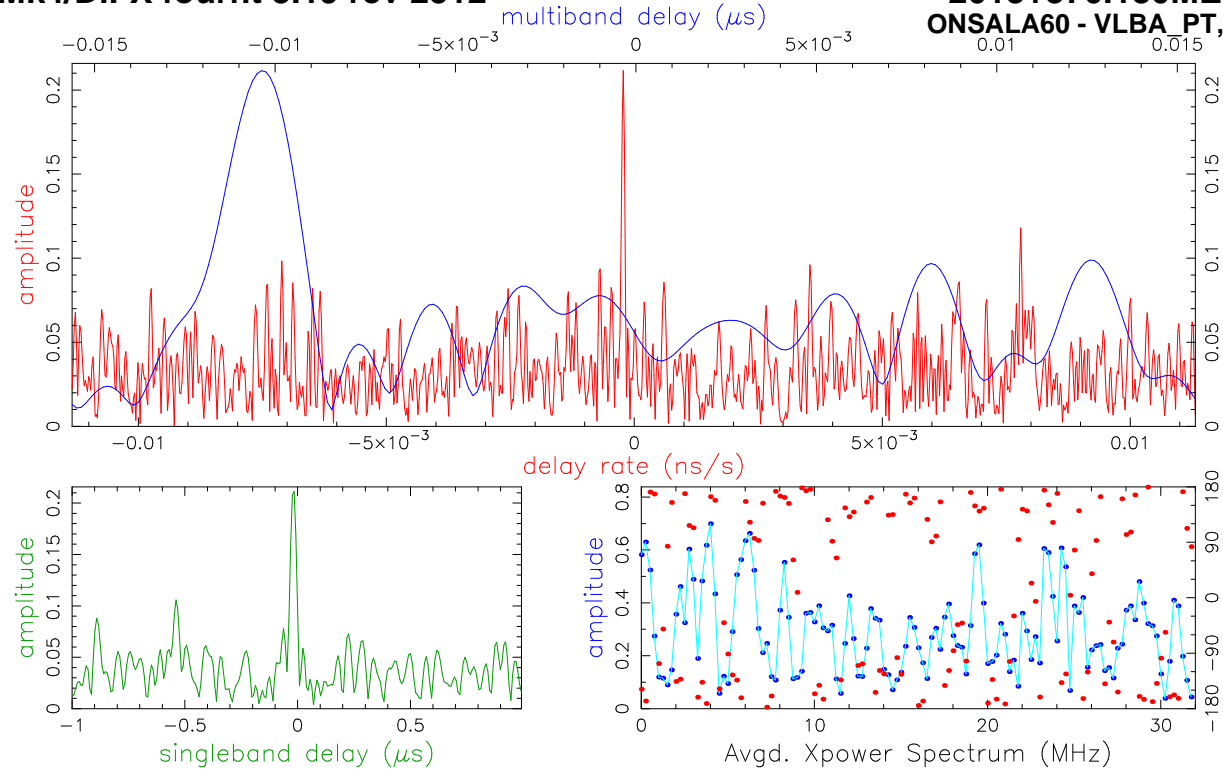
Fringe quality 0
 SNR 6.3
 Int time 179.204
 Amp 0.171
 Phase -126.7
 PFD 5.3e-02
 Delays (us)
 SBD 0.021285
 MBD -0.014146
 Fringe rate (Hz)
 -0.021508
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054448
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All			
	-81.4	-52.3	169.7	-133.2	-129.3	-72.3	-127.3	-151.9	-120.4	-81.2	106.6	132.0	-87.2	-72.3	-179.9	-84.8	Phase	-126.7			
	0.3	0.1	0.4	0.3	0.3	0.2	0.2	0.4	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.1	Ampl.	0.2			
	200.8	59.4	131.4	114.9	55.4	31.0	95.6	131.4	132.0	131.0	76.5	152.1	226.1	95.9	218.4	106.2	Sbd box	131.7			
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				
X	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 freqs				
X: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				
X: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				
x	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	PC amp				
x	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids				
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks				
																	Chan ids				
																	Tracks				
Group delay (usec)(sbd)	-1.05697564119E+04			Apriori delay (usec)			-1.05697735158E+04			Resid mbdelay (usec)			-1.41461E-02			+/- 1.7E-04					
Sband delay (usec)	-1.05697522313E+04			Apriori clock (usec)			2.0430901E+01			Resid sbdelay (usec)			2.12845E-02			+/- 2.8E-03					
Phase delay (usec)	-1.05697735199E+04			Apriori clockrate (us/s)			3.2411343E-07			Resid phdelay (usec)			-4.08675E-06			+/- 5.9E-07					
Delay rate (us/s)	-1.05022063952E+00			Apriori rate (us/s)			-1.05022038984E+00			Resid rate (us/s)			-2.49684E-07			+/- 5.7E-09					
Total phase (deg)	-0.8			Apriori accel (us/s/s)			7.53631490696E-05			Resid phase (deg)			-126.7			+/- 18.3					
ph/seg (deg)	RMS	Theor.	Amplitude			0.171 +/- 0.027			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5									
amp/seg (%)	34.2	30.4	Search (1024X64)			0.167			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000						
ph/frq (deg)	33.8	53.0	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016				
amp/frq (%)	61.4	36.7	Inc. seg. avg.			0.172			Sample rate(MSamp/s): 64			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			dr window (ns/s)		-0.011 0.011	
	84.3	64.0	Inc. frq. avg.			0.227			Data rate(Mb/s): 2048			ion window (TEC)			0.00 0.00						

X: az 297.5 el 27.1 pa 36.4 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 7616.838 6423.798 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Xp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Xp.W.334.130MEY

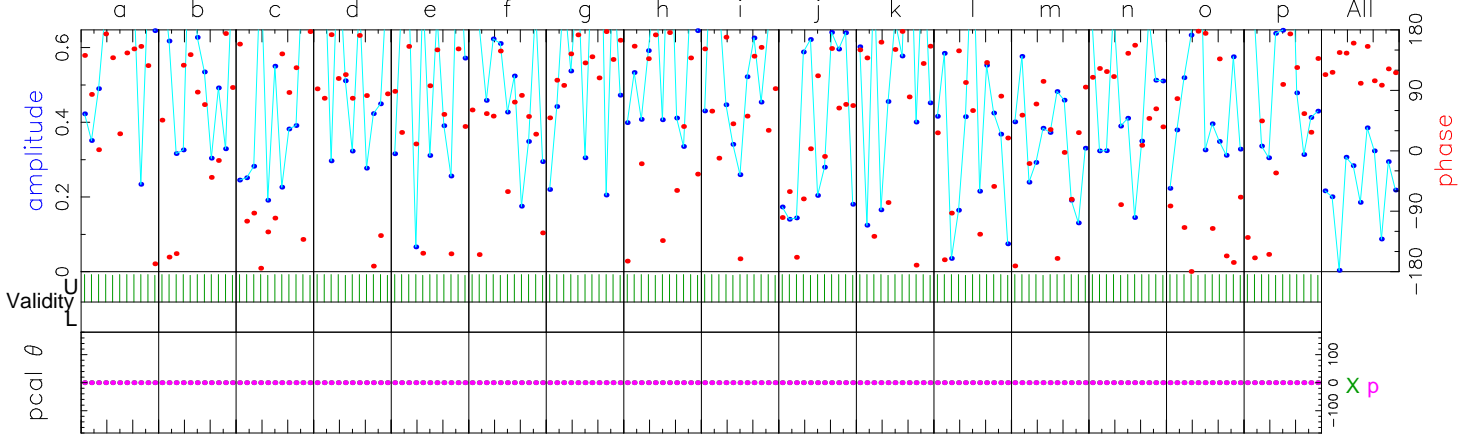


Fringe quality 9

SNR 7.9
 Int time 179.204
 Amp 0.216
 Phase 127.6
 PFD 4.7e-07
 Delays (us)
 SBD -0.018902
 MBD -0.010373
 Fringe rate (Hz)
 -0.019959
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

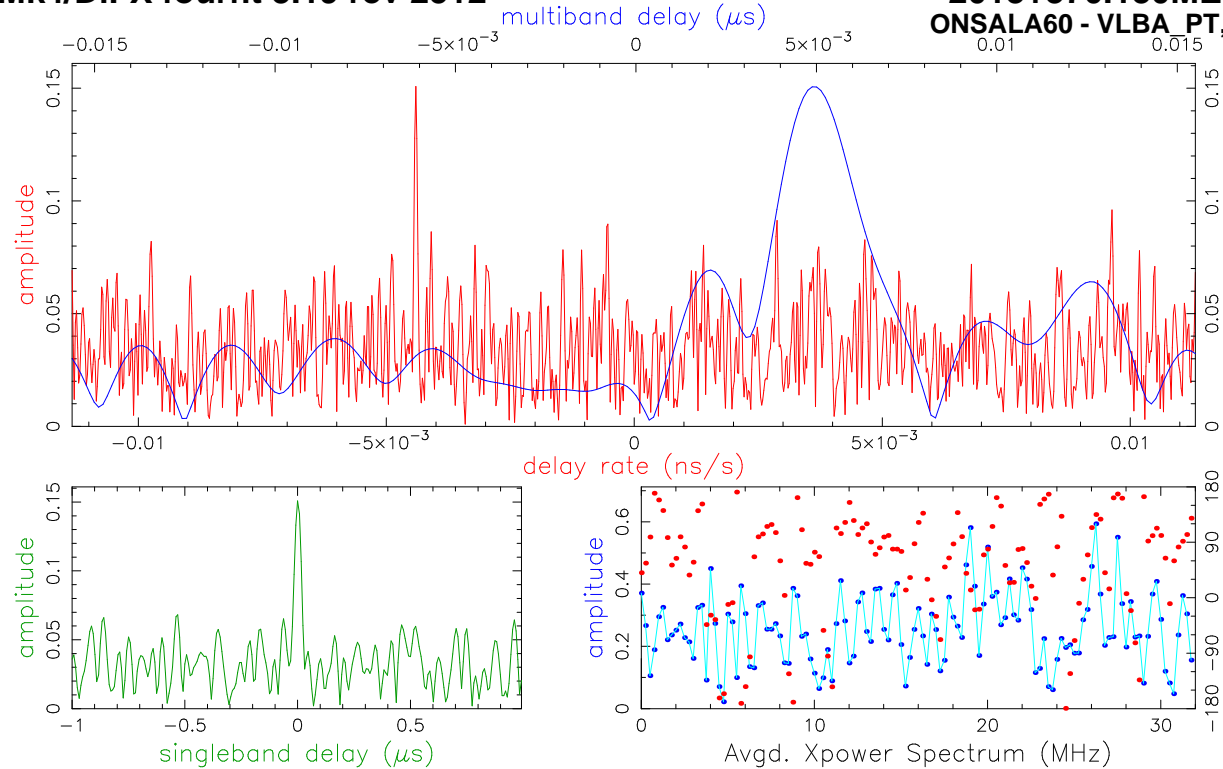
Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054450
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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				
136.6	104.7	-164.5	115.1	125.8	64.5	130.1	174.5	83.6	44.1	156.0	91.6	60.4	85.4	-164.7	157.4		Phase	127.6				
0.4	0.3	0.3	0.4	0.3	0.2	0.5	0.2	0.3	0.1	0.4	0.1	0.1	0.1	0.3	0.3	0.2	Ampl.	0.2				
127.2	48.4	128.3	14.7	133.1	24.8	127.0	74.9	28.2	55.7	68.1	21.8	208.7	124.8	115.3	92.7		Sbd box	126.6				
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					
X	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					
X: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					
X:p	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						
X	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)			-1.05697838892E+04														Apriori delay (usec)	-1.05697735158E+04	Resid mbdelay (usec)	-1.03734E-02	+/-	1.4E-04
Sband delay (usec)			-1.05697924178E+04														Apriori clock (usec)	2.0430901E+01	Resid sbdelay (usec)	-1.89020E-02	+/-	2.2E-03
Phase delay (usec)			-1.05697735117E+04														Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	4.11610E-06	+/-	4.7E-07
Delay rate (us/s)			-1.05022062154E+00														Apriori rate (us/s)	-1.05022038984E+00	Resid rate (us/s)	-2.31704E-07	+/-	4.5E-09
Total phase (deg)					-106.4												Apriori accel (us/s/s)	7.53631490696E-05	Resid phase (deg)	127.6	+/-	14.5

ph/seg (deg) 21.6 24.1 Search (1024X64) 0.204 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.9 42.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.5 29.0 Inc. seg. avg. 0.209 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 57.6 50.6 Inc. frq. avg. 0.247 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 297.5 el 27.1 pa 36.4 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 7616.838 6423.798 ion window (TEC) 0.00 0.00
 simultaneous interpolator

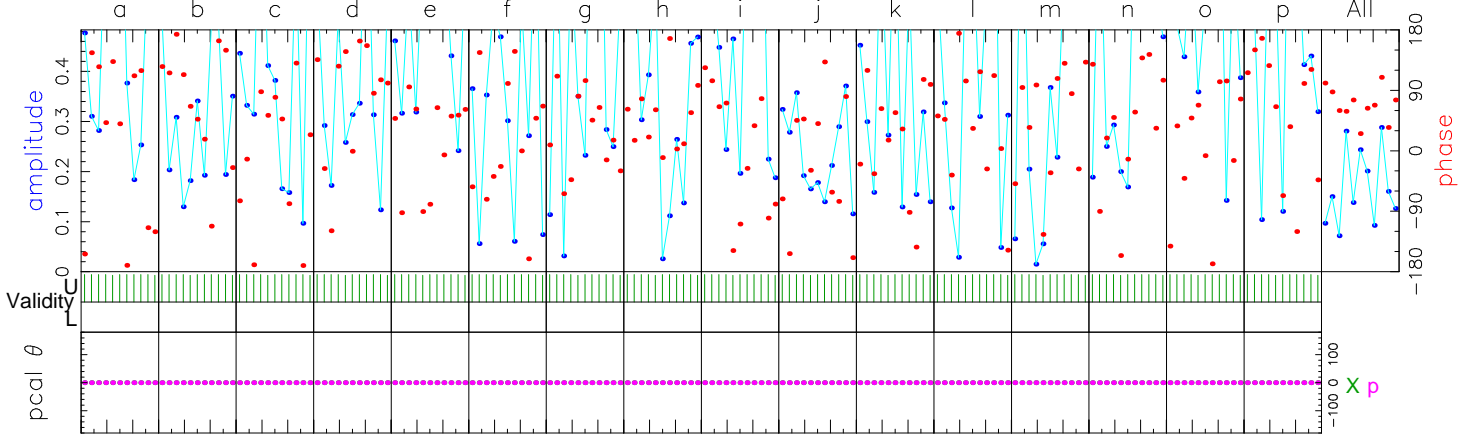


Fringe quality 0

SNR 5.5
 Int time 179.204
 Amp 0.161
 Phase 68.1
 PFD 9.8e-01
 Delays (us)
 SBD 0.001295
 MBD 0.004951
 Fringe rate (Hz)
 -0.379963
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054452
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	144.6	132.0	64.9	128.2	28.1	-7.5	42.8	49.8	67.2	-4.0	43.3	69.7	90.3	91.3	52.7	104.4	Phase	68.1				
	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2				
	32.4	78.3	163.1	162.3	97.2	94.4	218.0	78.2	19.6	172.0	143.7	122.0	58.1	19.1	235.8	152.6	Sbd box	129.2				
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					
X	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 freqs					
X: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					
X: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					
X	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						
X	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					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.05697685650E+04														Apriori delay (usec)	-1.05697735158E+04	Resid mbdelay (usec)	4.95078E-03	+/-	1.9E-04
Sband delay (usec)			-1.05697722208E+04														Apriori clock (usec)	2.0430901E+01	Resid sbdelay (usec)	1.29500E-03	+/-	3.1E-03
Phase delay (usec)			-1.05697735136E+04														Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	2.19544E-06	+/-	6.7E-07
Delay rate (us/s)			-1.05022480084E+00														Apriori rate (us/s)	-1.05022038984E+00	Resid rate (us/s)	-4.41100E-06	+/-	6.4E-09
Total phase (deg)																	Apriori accel (us/s/s)	7.53631490696E-05	Resid phase (deg)	68.1	+/-	20.7

ph/seg (deg) 24.1 34.3
 amp/seg (%) 49.0 59.9
 ph/frq (deg) 46.5 41.4
 amp/frq (%) 50.0 72.3

RMS Theor. Amplitude 0.161 +/- 0.029
 Search (1024X64) 0.148
 Interp. 0.000
 Inc. seg. avg. 0.152
 Inc. frq. avg. 0.160

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

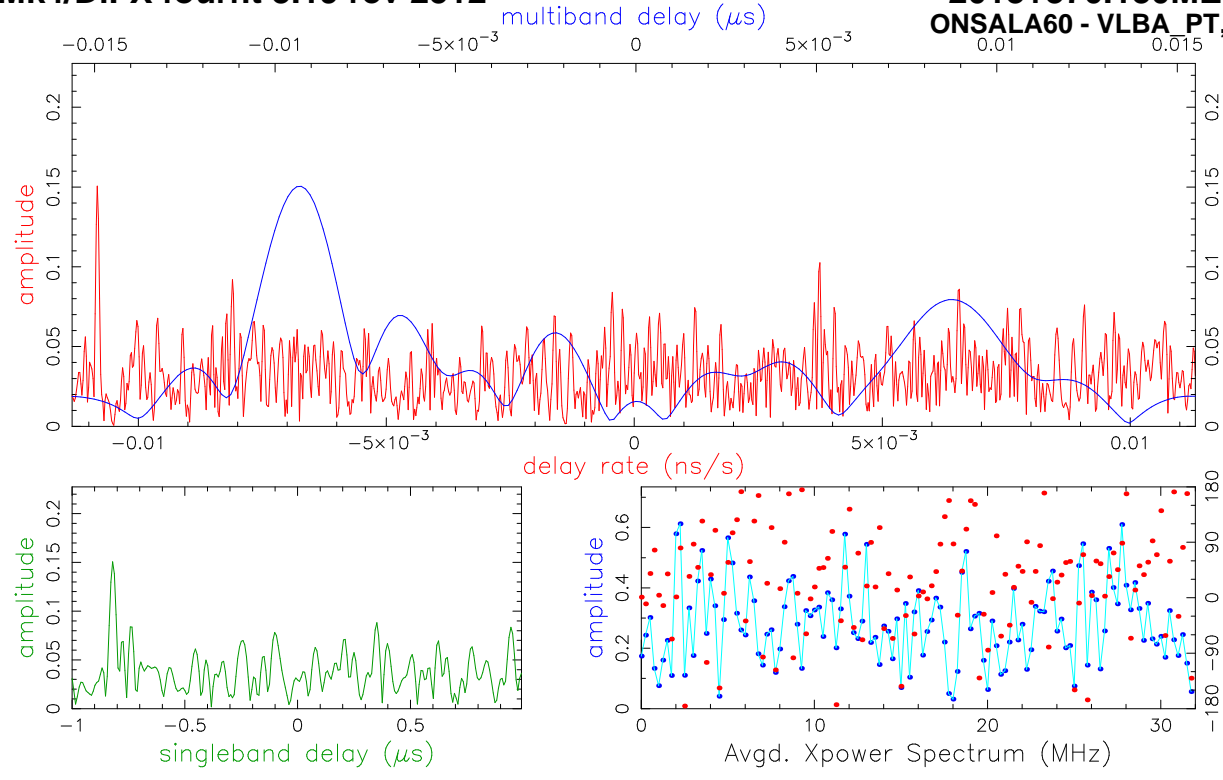
sb window (us) -1.000 1.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

X: az 297.5 el 27.1 pa 36.4 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 7616.838 6423.798 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Xp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Xp.W.367.130MEY

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MEY, No0072, Xp
 ONSALA60 - VLBA_PT, fgroup W, pol RL

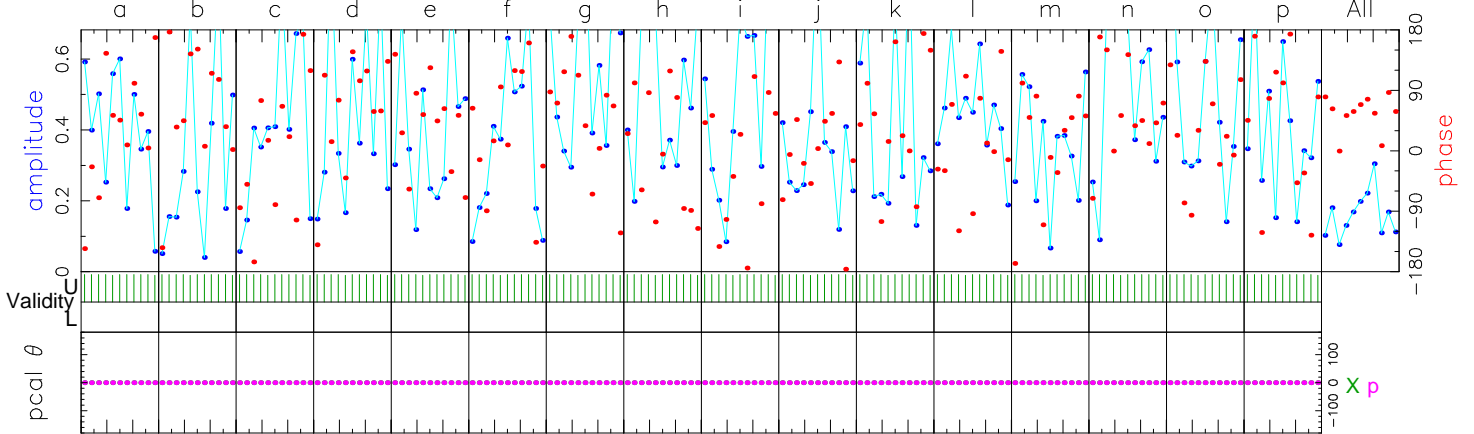


Fringe quality 0

SNR 5.5
 Int time 179.204
 Amp 0.227
 Phase 60.4
 PFD 9.8e-01
 Delays (us)
 SBD -0.819191
 MBD -0.009318
 Fringe rate (Hz)
 -0.934966
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054454
 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



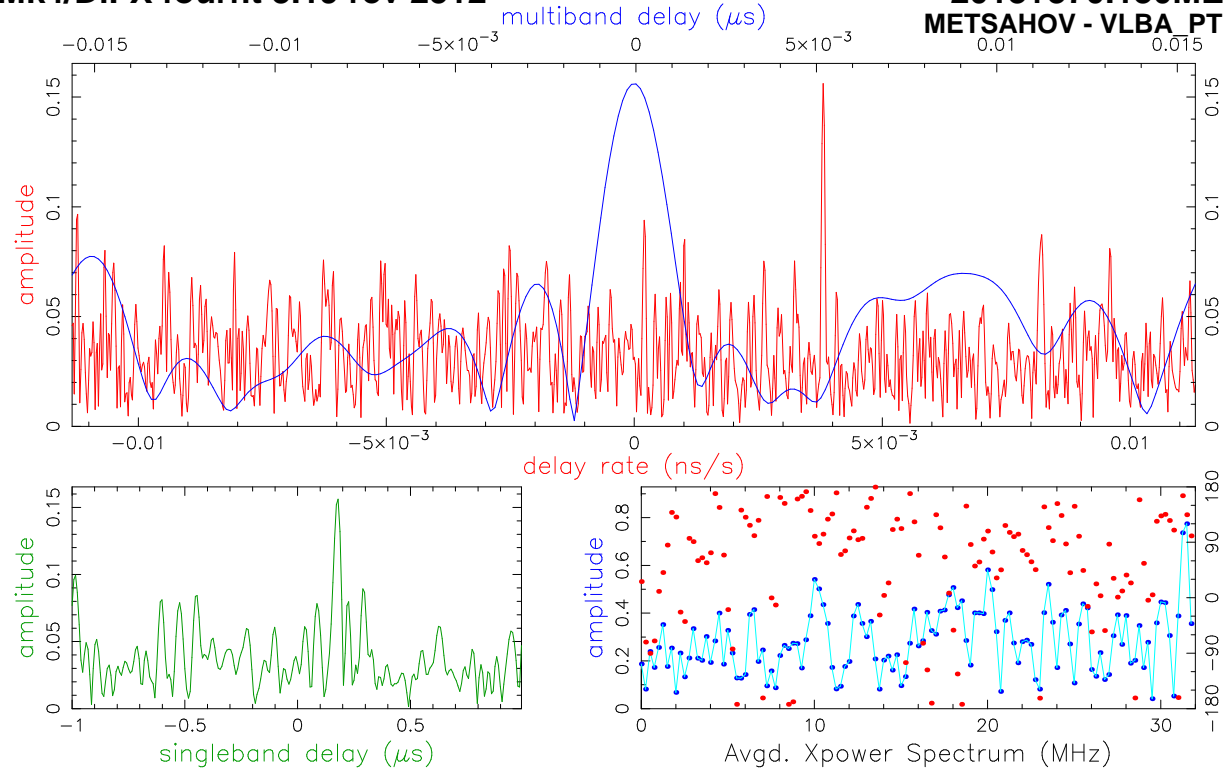
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
35.8	100.4	82.1	83.2	20.7	91.4	71.3	-70.5	64.5	-2.0	73.7	28.3	52.8	53.9	71.7	123.4	123.4	Phase	60.4
0.2	0.3	0.0	0.4	0.3	0.2	0.4	0.2	0.4	0.3	0.2	0.2	0.2	0.3	0.5	0.3	0.2	Ampl.	0.2
188.3	255.6	148.3	105.0	118.0	14.4	115.6	157.3	225.0	205.9	193.7	73.5	76.4	33.2	105.0	132.0	132.0	Sbd box	24.1
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	
X	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	
X: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	
X:p	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		
x	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)	-1.05705953336E+04	Apriori delay (usec)	-1.05697735158E+04	Resid mbdelay (usec)	-9.31780E-03	+/-	2.0E-04
Sband delay (usec)	-1.05705927063E+04	Apriori clock (usec)	2.0430901E+01	Resid sbdelay (usec)	-8.19191E-01	+/-	3.1E-03
Phase delay (usec)	-1.05697735138E+04	Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	1.94768E-06	+/-	6.7E-07
Delay rate (us/s)	-1.05023124386E+00	Apriori rate (us/s)	-1.05022038984E+00	Resid rate (us/s)	-1.08540E-05	+/-	6.4E-09
Total phase (deg)	-173.7	Apriori accel (us/s/s)	7.53631490696E-05	Resid phase (deg)	60.4	+/-	20.7

ph/seg (deg)	27.0	Theor.	34.4	Amplitude	0.227 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	42.0	Search (1024X64)	0.149	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	48.0	Inc. seg. avg.	0.206	Inc. seg. avg.	0.206	Bits/sample: 2x2	mb window (us) -0.016 0.016
amp/frq (%)	53.9	Inc. frq. avg.	0.224	Inc. frq. avg.	0.224	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
						nlags: 128 t_cohere infinite	

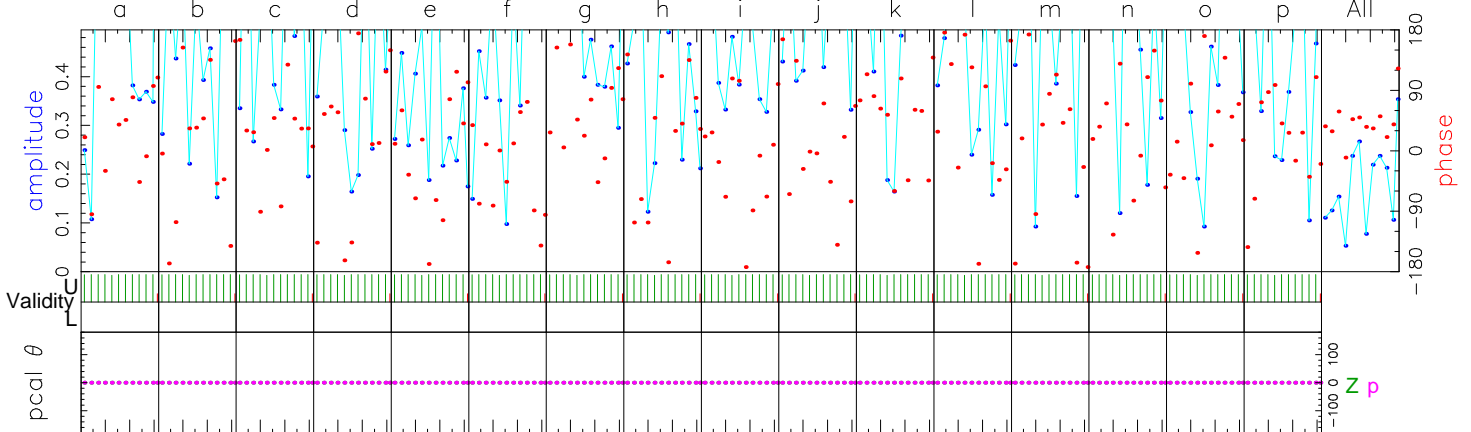
X: az 297.5 el 27.1 pa 36.4 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 7616.838 6423.798 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Xp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Xp.W.384.130MEY



Fringe quality 0
 SNR 5.8
 Int time 178.663
 Amp 0.165
 Phase 43.2
 PFD 6.4e-01
 Delays (us)
 SBD 0.177066
 MBD -0.000039
 Fringe rate (Hz) 0.328734
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.51
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build 2020:076:163344
 2020:086:054455
 2020:014:135814
 RA & Dec (J2000) 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 31 APs / seg (15.87 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	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		APs used						
Z	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 freqs						
Z: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						
Z: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						
Z	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		PC amp						
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids						
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks						
																			Chan ids					
																			Tracks					
Group delay (usec)(sbd)		-1.19558028390E+04																	Apriori delay (usec)	-1.19559903001E+04	Resid mbdelay (usec)	-3.89414E-05	+/-	1.9E-04
Sband delay (usec)		-1.19558132346E+04																	Apriori clock (usec)	-1.1801479E+01	Resid sbdelay (usec)	1.77066E-01	+/-	3.0E-03
Phase delay (usec)		-1.19559902987E+04																	Apriori clockrate (us/s)	-1.8759378E-07	Resid phdelay (usec)	1.39193E-06	+/-	6.4E-07
Delay rate (us/s)		-9.66566206135E-01																	Apriori rate (us/s)	-9.66570022413E-01	Resid rate (us/s)	3.81628E-06	+/-	6.2E-09
Total phase (deg)																			Apriori accel (us/s/s)	8.43108500856E-05	Resid phase (deg)	43.2	+/-	19.9

ph/seg (deg) 23.0 34.4
 amp/seg (%) 48.6 60.1
 ph/frq (deg) 58.6 39.7
 amp/frq (%) 58.1 69.4

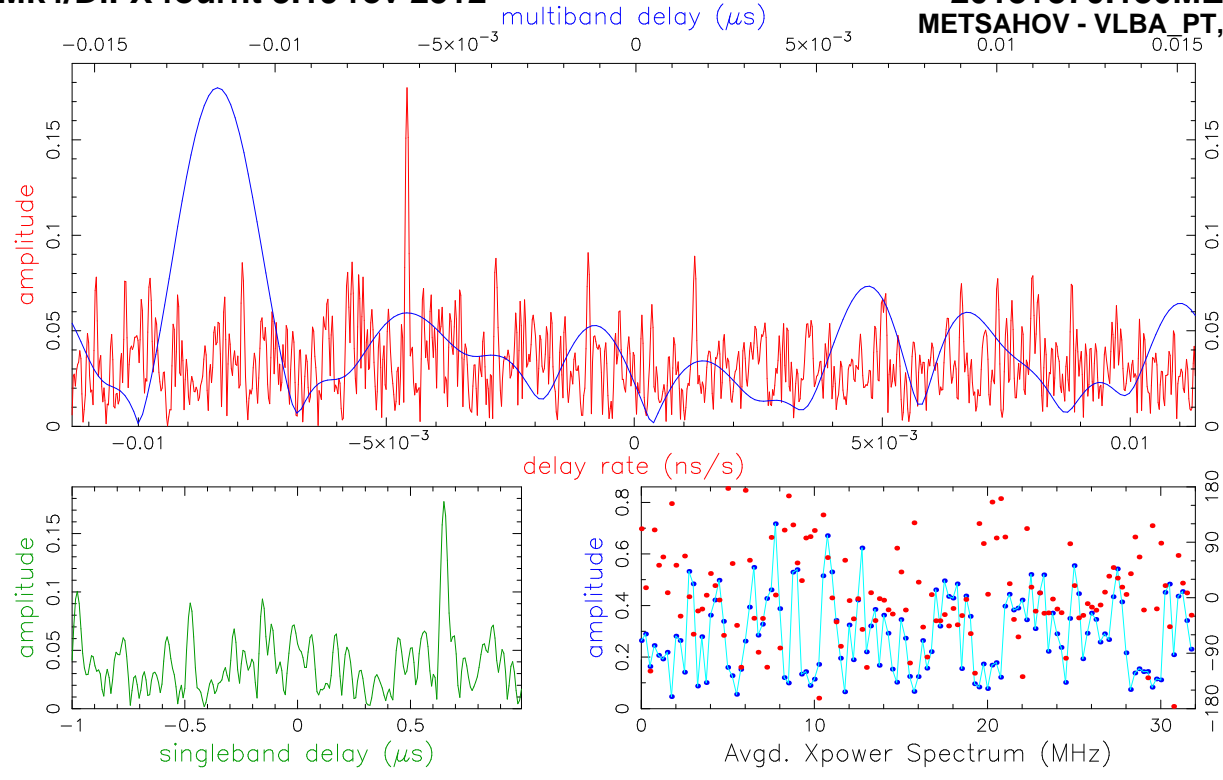
RMS Theor. Amplitude 0.165 +/- 0.029
 Search (1024X64) 0.149
 Interp. 0.000
 Inc. seg. avg. 0.150
 Inc. frq. avg. 0.168

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MISamp/s): 64
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

Z: az 305.5 el 23.1 pa 30.6 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 7022.119 7142.260 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Zp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Zp.W.392.130MEY

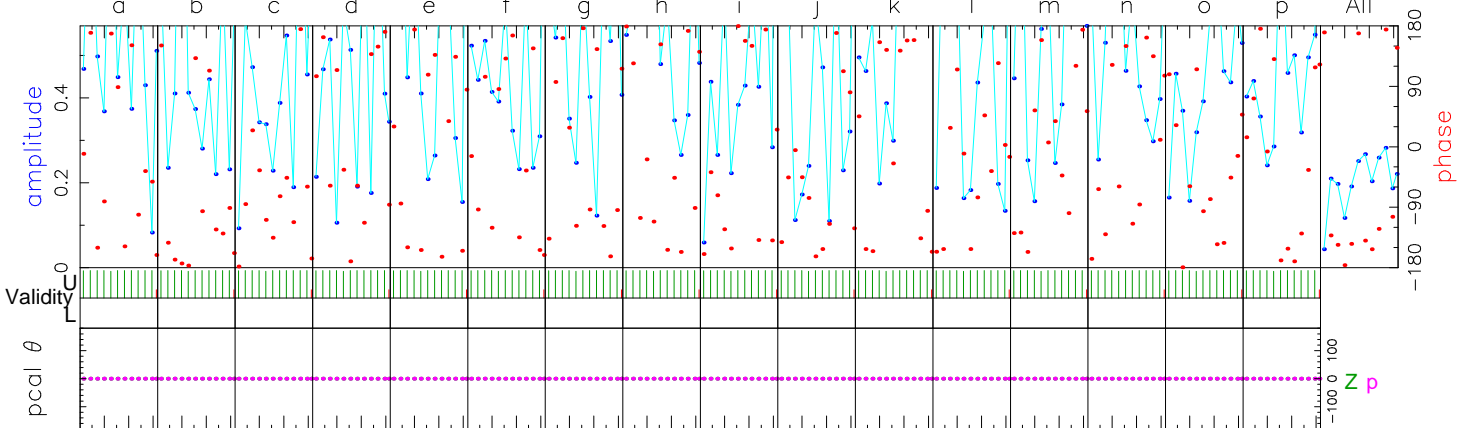


Fringe quality 0

SNR 6.5
 Int time 178.663
 Amp 0.190
 Phase -152.1
 PFD 1.2e-02
 Delays (us)
 SBD 0.649338
 MBD -0.011589
 Fringe rate (Hz)
 -0.394871
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

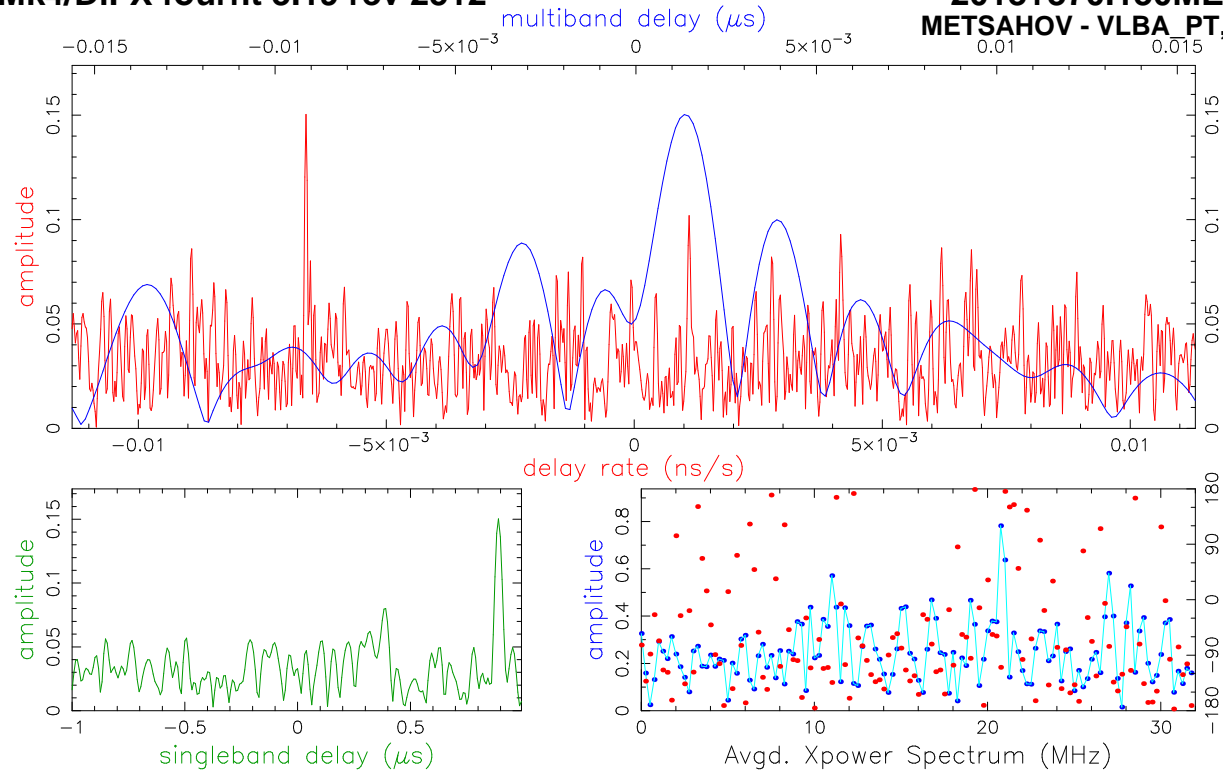
Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.51
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054457
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 31 APs / seg (15.87 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	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
Z	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		
Z: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		
Z: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		
Z	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		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-1.19553456386E+04															
Sband delay (usec)			-1.19553409616E+04															
Phase delay (usec)			-1.19559903050E+04															
Delay rate (us/s)			-9.66574606479E-01															
Total phase (deg)					-313.8													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 29.2 30.6 Search (1024X64) 0.175 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.6 53.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.0 35.3 Inc. seg. avg. 0.189 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.5 61.7 Inc. frq. avg. 0.185 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Z: az 305.5 el 23.1 pa 30.6 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 7022.119 7142.260 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Zp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Zp.W.403.130MEY

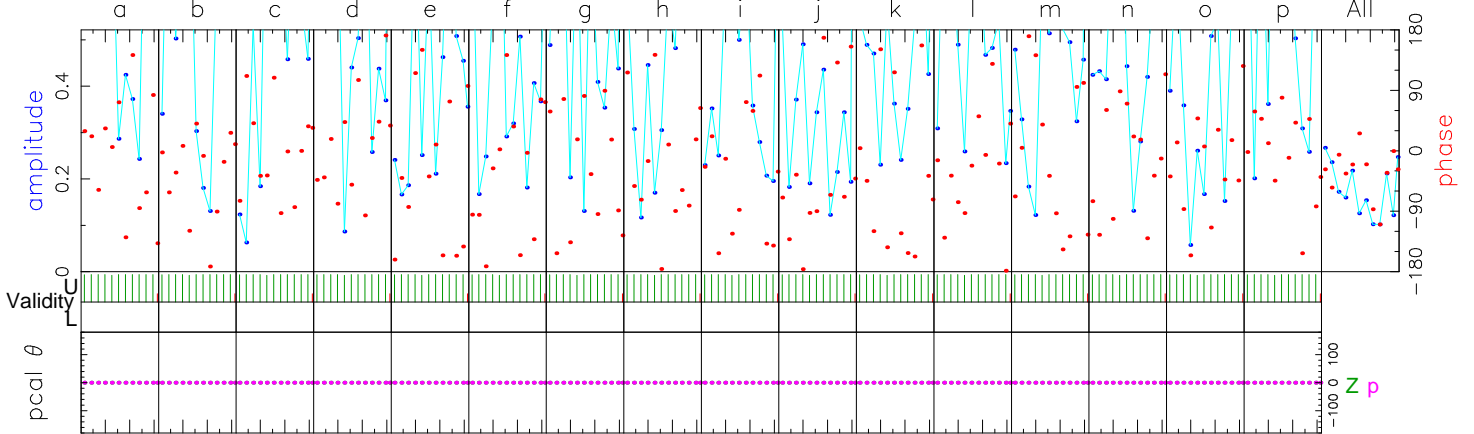


Fringe quality 0

SNR 5.5
 Int time 178.663
 Amp 0.174
 Phase -29.8
 PFD 9.9e-01
 Delays (us)
 SBD 0.890091
 MBD 0.001363
 Fringe rate (Hz)
 -0.570446
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.51
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054459
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

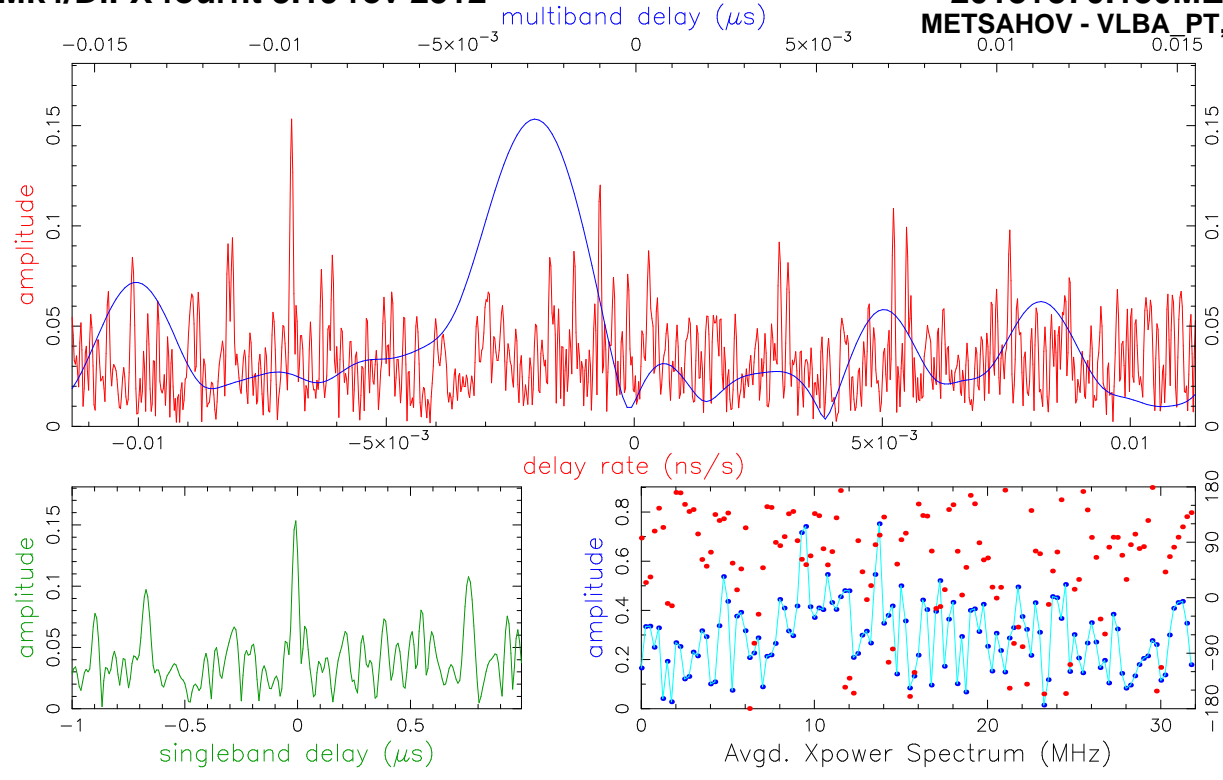


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
0.2	-31.3	-20.1	-33.8	157.9	-42.7	-3.5	-33.8	-28.9	-96.2	-135.9	-31.4	-94.4	-14.3	-16.2	5.2		Phase	-29.8				
0.3	0.4	0.3	0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.1	0.1	0.3	0.4	Ampl.	0.2				
40.9	251.0	164.9	123.9	170.0	255.6	168.7	54.5	187.7	177.0	240.1	96.1	213.8	34.4	82.5	237.9		Sbd box	242.9				
UL	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used					
Z	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 freqs					
Z: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					
Z: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					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
																	Tracks					
Group delay (usec)(sbd)		-1.19551139374E+04															Apriori delay (usec)	-1.19559903001E+04	Resid mbdelay (usec)	1.36270E-03	+/-	2.0E-04
Sband delay (usec)		-1.19551002091E+04															Apriori clock (usec)	-1.1801479E+01	Resid sbdelay (usec)	8.90091E-01	+/-	3.1E-03
Phase delay (usec)		-1.19559903010E+04															Apriori clockrate (us/s)	-1.8759378E-07	Resid phdelay (usec)	-9.62331E-07	+/-	6.7E-07
Delay rate (us/s)		-9.66576644727E-01															Apriori rate (us/s)	-9.66570022413E-01	Resid rate (us/s)	-6.62231E-06	+/-	6.5E-09
Total phase (deg)					-191.5												Apriori accel (us/s/s)	8.43108500856E-05	Resid phase (deg)	-29.8	+/-	20.8

ph/seg (deg) RMS Theor. Amplitude 0.174 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 36.5 36.1 Search (1024X64) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.9 63.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 61.6 41.7 Inc. seg. avg. 0.166 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 66.2 72.7 Inc. frq. avg. 0.177 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 305.5 el 23.1 pa 30.6 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 7022.119 7142.260 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Zp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Zp.W.411.130MEY

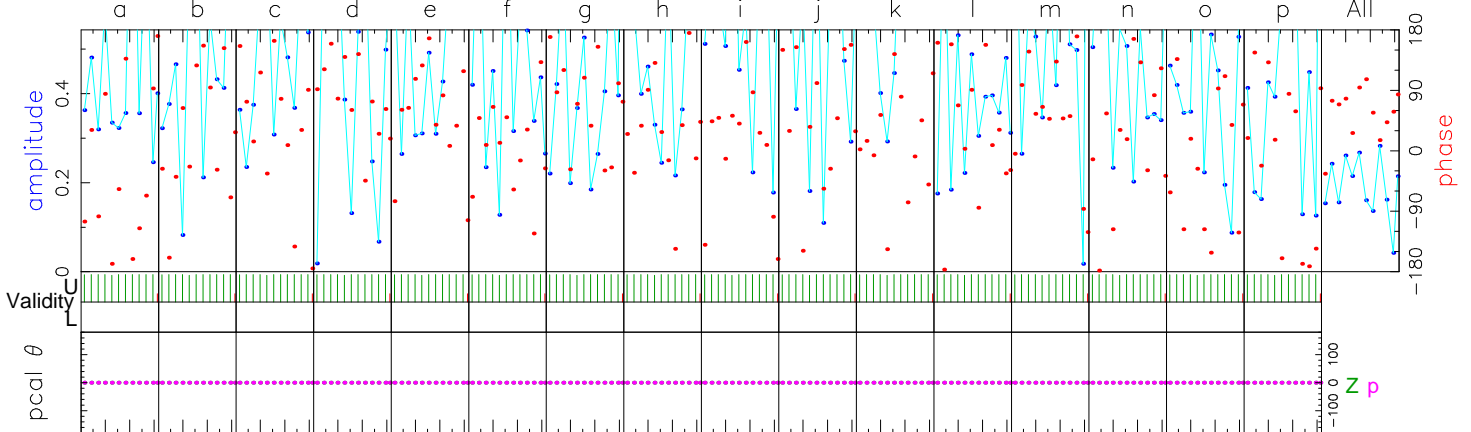


Fringe quality 0

SNR 5.6
 Int time 178.663
 Amp 0.181
 Phase 57.8
 PFD 8.6e-01
 Delays (us)
 SBD -0.009995
 MBD -0.002790
 Fringe rate (Hz)
 -0.596138
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 010000.51
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:076:163344
 2020:086:054501
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 31 APs / seg (15.87 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
	-134.8	-6.7	78.5	100.2	61.5	27.0	77.5	24.4	40.6	95.5	17.8	83.6	65.7	63.9	-73.4	100.0	Phase	57.8
	0.2	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.2	0.4	0.1	0.3	0.2	0.1	0.2	Ampl.	0.2
	248.6	205.8	176.9	174.8	224.1	100.0	170.4	9.7	152.9	122.5	133.3	42.3	122.0	244.1	89.3	210.9	Sbd box	127.7
UL	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
Z	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 freqs	
Z: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	
Z: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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-1.19559930899E+04			Apriori delay (usec)			-1.19559903001E+04			Resid mbdelay (usec)			-2.78987E-03			+/-	1.9E-04	
Sband delay (usec)	-1.19560002951E+04			Apriori clock (usec)			-1.1801479E+01			Resid sbdelay (usec)			-9.99500E-03			+/-	3.0E-03	
Phase delay (usec)	-1.19559902982E+04			Apriori clockrate (us/s)			-1.8759378E-07			Resid phdelay (usec)			1.86360E-06			+/-	6.5E-07	
Delay rate (us/s)	-9.66576942988E-01			Apriori rate (us/s)			-9.66570022413E-01			Resid rate (us/s)			-6.92057E-06			+/-	6.3E-09	
Total phase (deg)	-103.8			Apriori accel (us/s/s)			8.43108500856E-05			Resid phase (deg)			57.8			+/-	20.3	

ph/seg (deg) 37.8 35.1 Amplitude 0.181 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.4 61.3 Search (1024X64) 0.147 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 65.4 40.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.1 70.8 Inc. seg. avg. 0.187 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Z: az 305.5 el 23.1 pa 30.6 p: az 74.3 el 71.3 pa -91.8 u,v (fr/asec) 7022.119 7142.260 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0072/Zp..130MEY Output file: /Exps/c192c/v2/1234/No0072/Zp.W.415.130MEY simultaneous interpolator