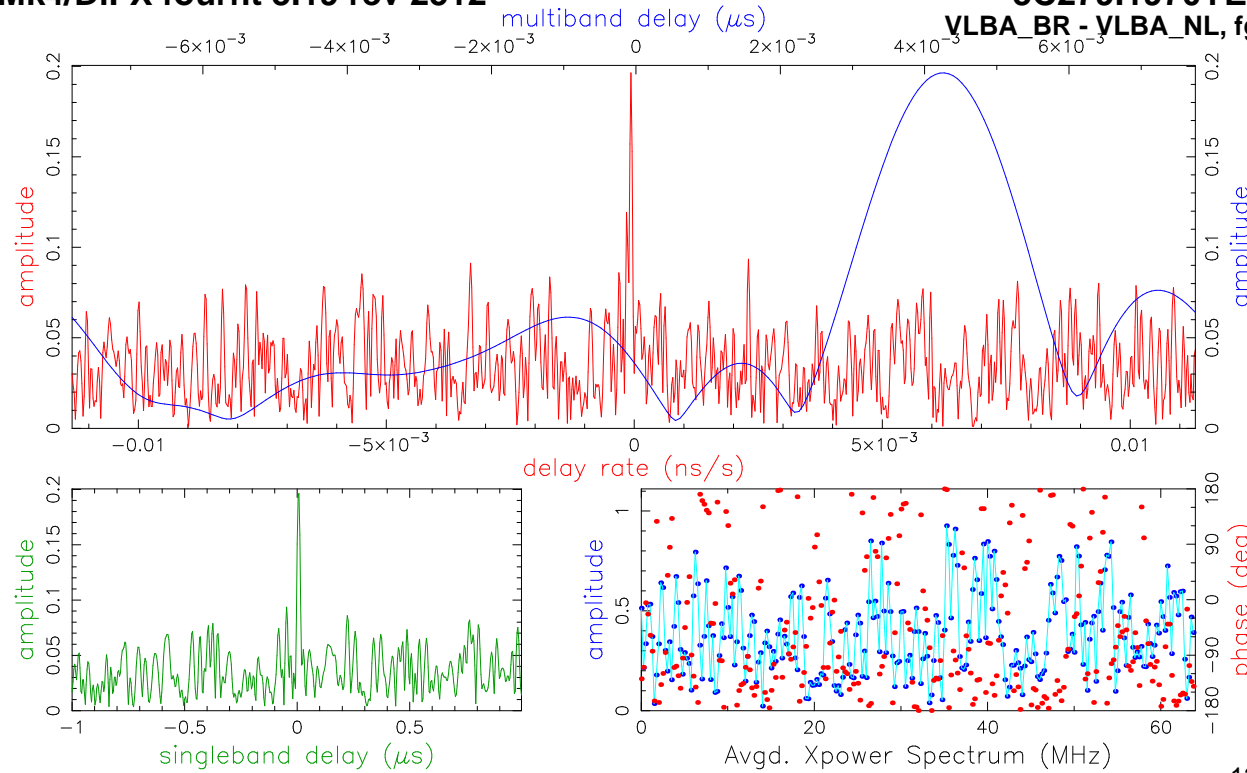


Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, bn
VLBA_BR - VLBA_NL, fgroup W, pol RL

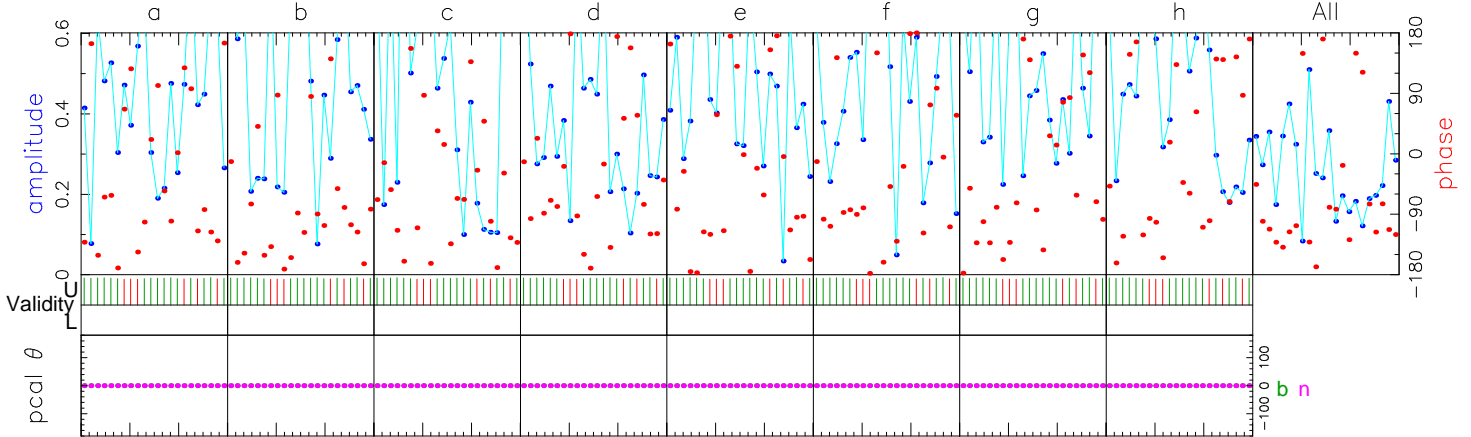


Fringe quality 9

SNR 7.2
Int time 174.305
Amp 0.200
Phase -114.7
PFD 7.0e-05
Delays (us)
SBD 0.006105
MBD 0.004270
Fringe rate (Hz)
-0.005144
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155321
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

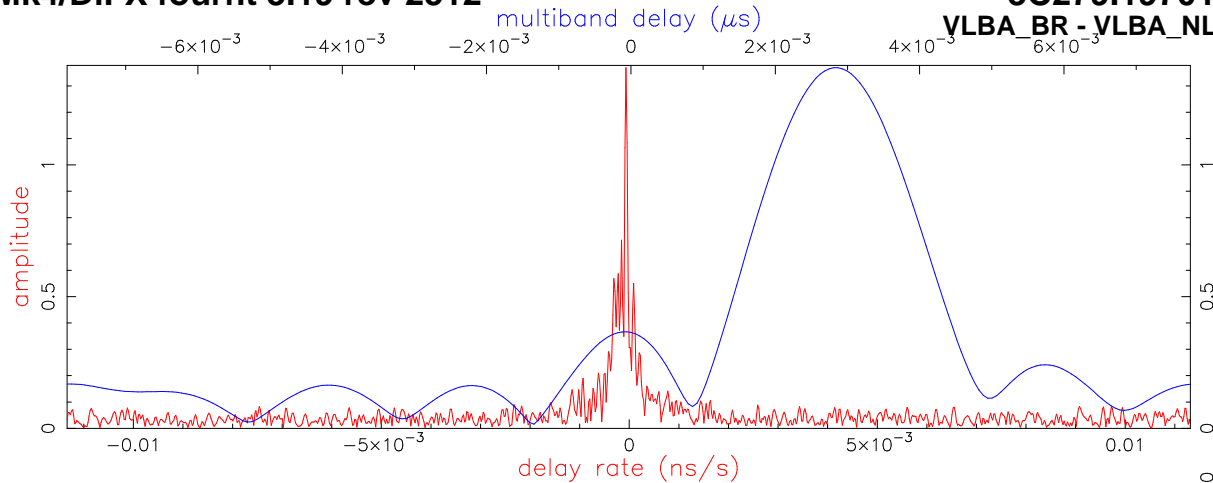


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.7	-114.9	-112.0	-69.4	-137.9	-119.7	-109.5	-124.9	Phase	-114.7
	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	161.6	357.0	506.4	154.1	263.8	160.5	355.5	342.1	Sbd box	258.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.97685881076E+03		Apriori delay (usec)		-3.97686308121E+03		Resid mbdelay (usec)		4.27044E-03	+/- 1.5E-04
Sband delay (usec)	-3.97685697596E+03		Apriori clock (usec)		-3.3755482E+01		Resid sbdelay (usec)		6.10525E-03	+/- 1.2E-03
Phase delay (usec)	-3.97686308491E+03		Apriori clockrate (us/s)		-3.7599999E-07		Resid phdelay (usec)		-3.69915E-06	+/- 5.1E-07
Delay rate (us/s)	4.68541164467E-01		Apriori rate (us/s)		4.68541224184E-01		Resid rate (us/s)		-5.97172E-08	+/- 4.9E-09
Total phase (deg)			Apriori accel (us/s/s)		2.00559797209E-05		Resid phase (deg)		-114.7	+/- 15.8

ph/seg (deg) 53.8 37.1 Search (1024X32) 0.191 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.5 64.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.2 22.4 Inc. seg. avg. 0.217 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.9 39.1 Inc. frq. avg. 0.193 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 142.5 el 29.0 pa -24.1 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -2687.084 529.614 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/bn..1970YE Output file: /Exps/c201e/v1/1234/No0073/bn.W.116.1970YE

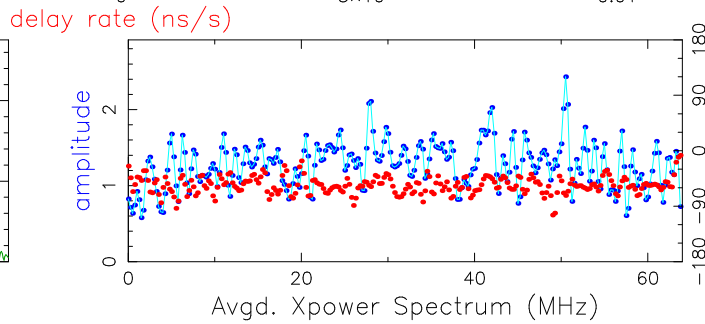
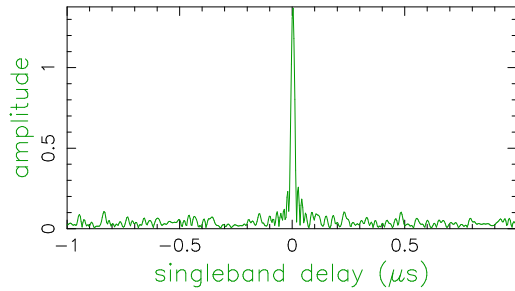
Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, bn
VLBA_BR - VLBA_NL, fgroup W, pol LL



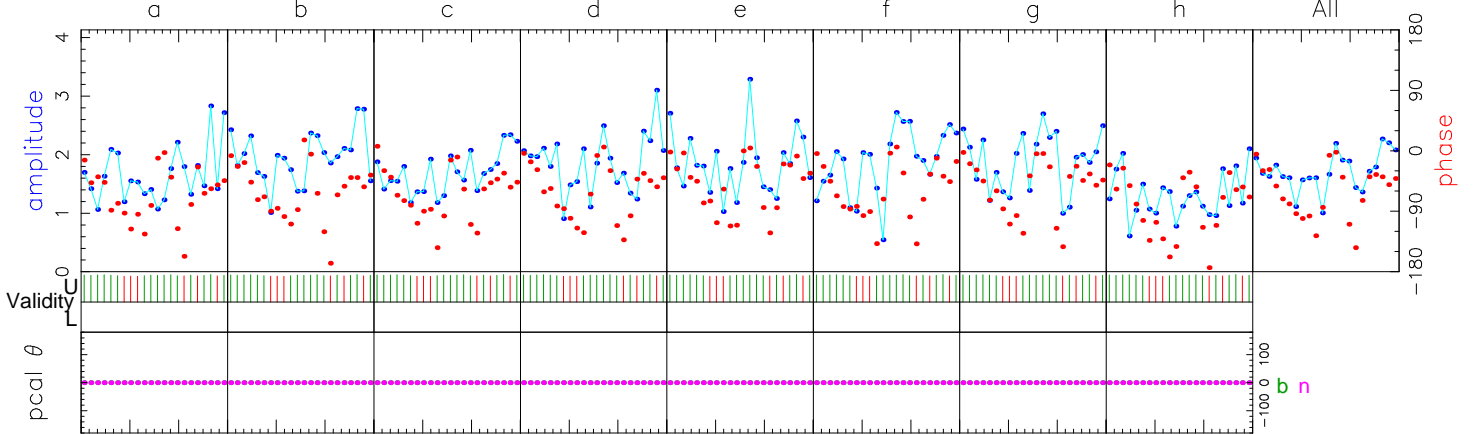
Fringe quality 5

SNR 49.7
Int time 174.305
Amp 1.378
Phase -55.5
PFD 0.0e+00
Delays (us)
SBD 0.002883
MBD 0.002809
Fringe rate (Hz)
-0.004963
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155305
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

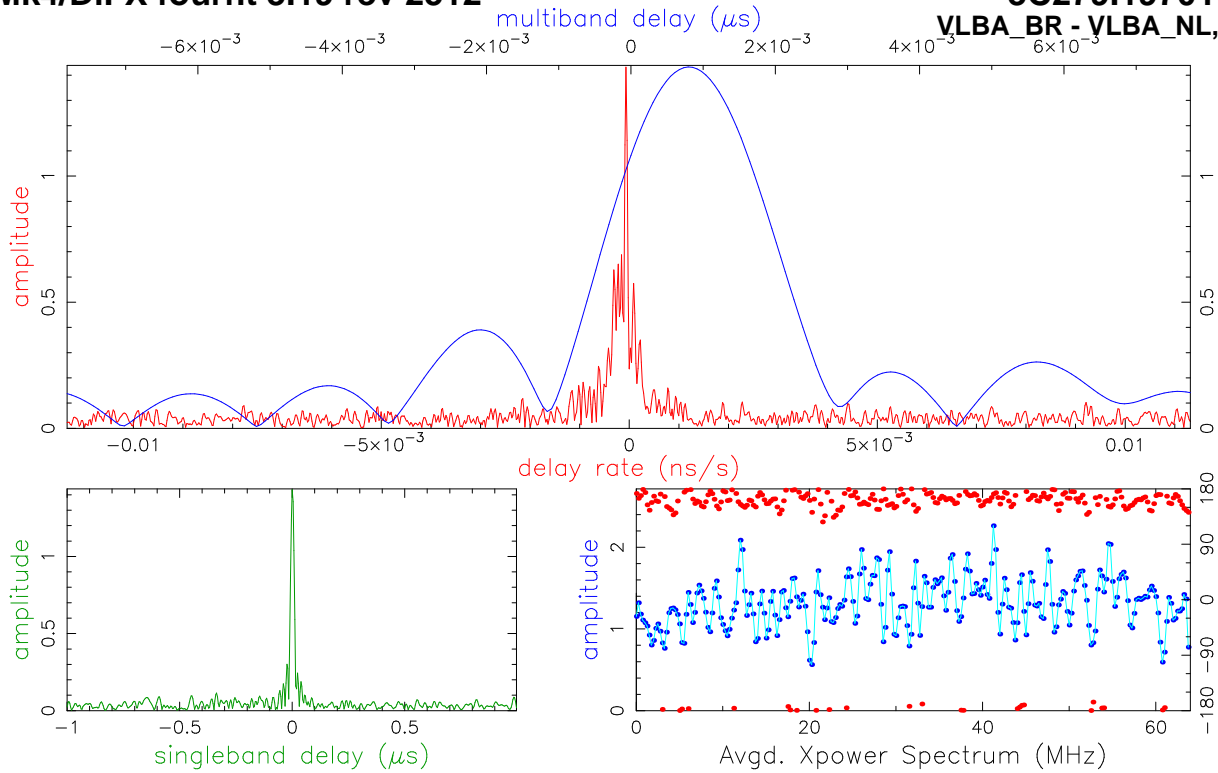


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.97686027233E+03	Apriori delay (usec)	-3.97686308121E+03	Resid mbdelay (usec)	2.80888E-03	+/-	2.2E-05
Sband delay (usec)	-3.97686019821E+03	Apriori clock (usec)	-3.3755482E+01	Resid sbdelay (usec)	2.88300E-03	+/-	1.7E-04
Phase delay (usec)	-3.97686308300E+03	Apriori clockrate (us/s)	-3.7599999E-07	Resid phdelay (usec)	-1.79013E-06	+/-	7.4E-08
Delay rate (us/s)	4.68541166573E-01	Apriori rate (us/s)	4.68541224184E-01	Resid rate (us/s)	-5.76114E-08	+/-	7.1E-10
Total phase (deg)	-349.0	Apriori accel (us/s/s)	2.00559797209E-05	Resid phase (deg)	-55.5	+/-	2.3

ph/seg (deg)	39.0	Theor.	5.4	Amplitude	1.378 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	33.6		9.4	Search (1024X32)	1.315	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	11.6		3.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	12.1		5.7	Inc. seg. avg.	1.709	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	1.385	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 142.5 el 29.0 pa -24.1 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -2687.084 529.614 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/bn..1970YE Output file: /Exps/c201e/v1/1234/No0073/bn.W.6.1970YE

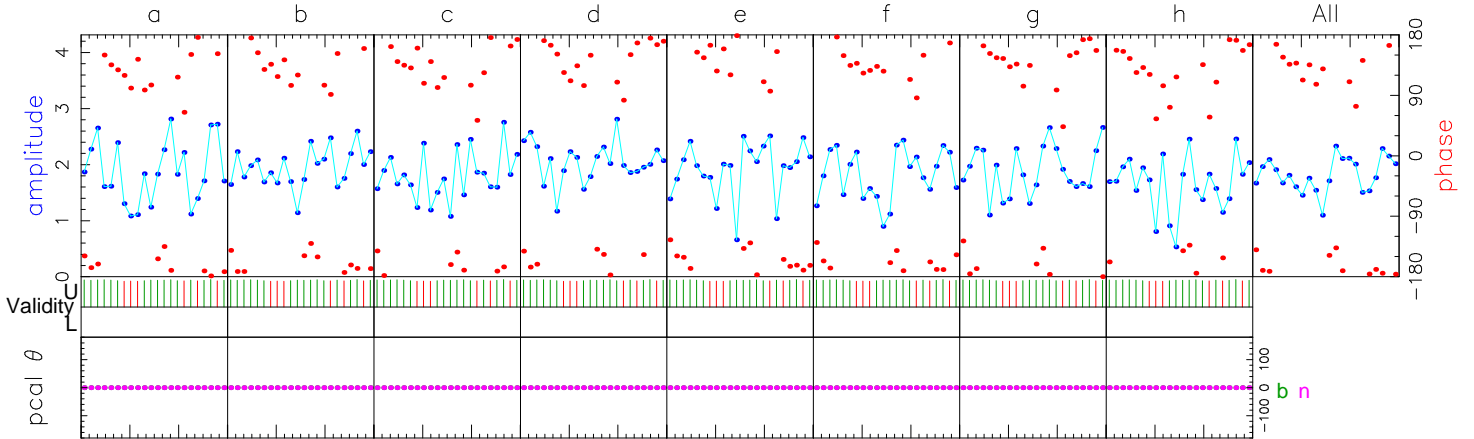


Fringe quality 6

SNR 51.9
Int time 174.304
Amp 1.439
Phase 164.3
PFD 0.0e+00
Delays (us)
SBD 0.000850
MBD 0.000820
Fringe rate (Hz)
-0.005027
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

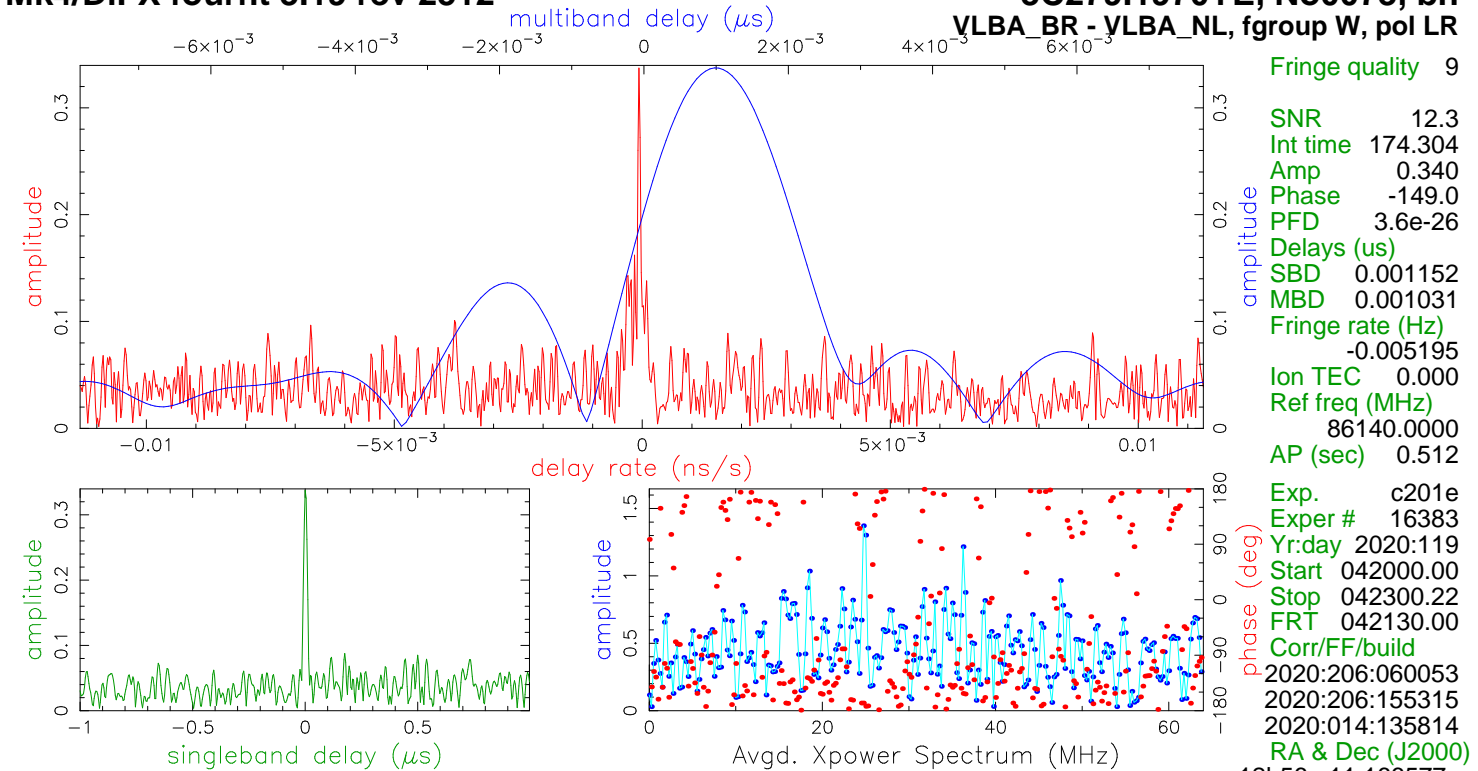
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155313
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.97686226108E+03									
Sband delay (usec)	-3.97686223096E+03									
Phase delay (usec)	-3.97686307591E+03									
Delay rate (us/s)	4.68541165826E-01									
Total phase (deg)			-129.2							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									164.3	+/- 2.2
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate(MISamp/s):	128									
Data rate(Mb/s):	2048									
nlags:	256									
t_cohere	infinite									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

ph/seg (deg) 39.2 5.2 Search (1024X32) 1.373 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 33.9 9.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.0 3.1 Inc. seg. avg. 1.818 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 7.7 5.4 Inc. frq. avg. 1.443 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 142.5 el 29.0 pa -24.1 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -2687.084 529.614 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/bn..1970YE Output file: /Exps/c201e/v1/1234/No0073/bn.W.63.1970YE



Fringe quality 9

SNR 12.3

Int time 174.304

Amp 0.340

Phase -149.0

PFD 3.6e-26

Delays (us)

SBD 0.001152

MBD 0.001031

Fringe rate (Hz)

-0.005195

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 042000.00

Stop 042300.22

FRT 042130.00

Corr/FF/build

2020:206:060053

2020:206:155315

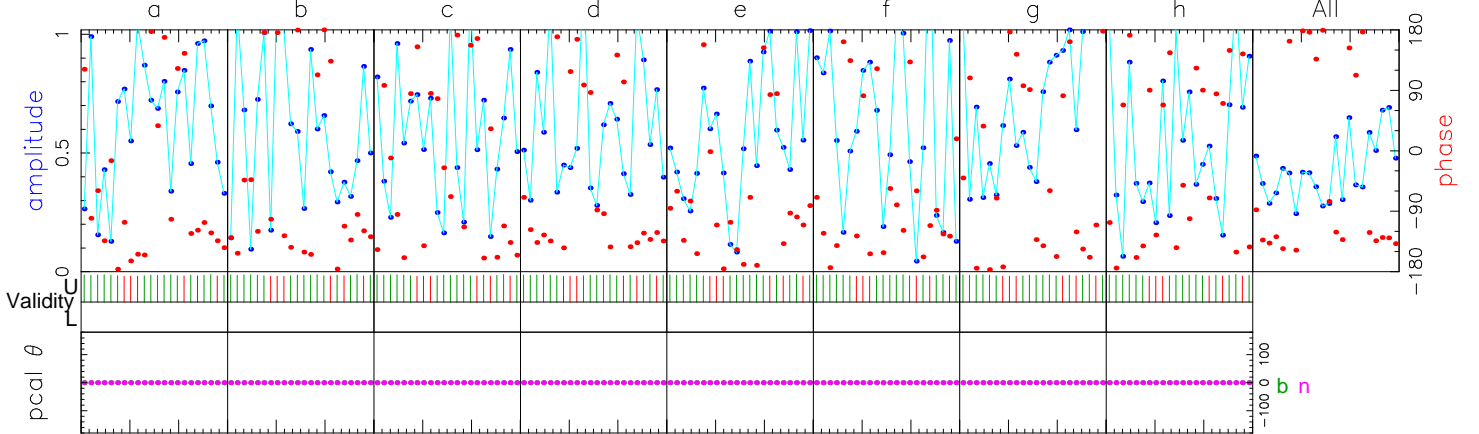
2020:014:135814

RA & Dec (J2000)

12h56m11.166577s

--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

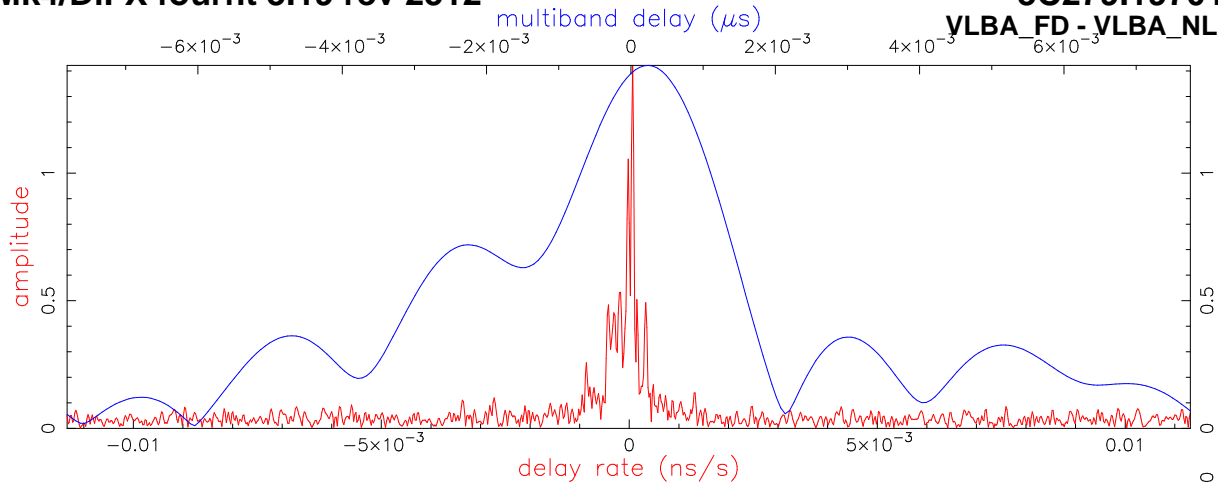


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	-147.5	-149.8	-160.2	-148.4	-124.3	-133.0	-162.4	-164.3	Phase	-149.0
Sband delay (usec)	0.4	0.4	0.3	0.4	0.2	0.4	0.4	0.3	Ampl.	0.3
Phase delay (usec)	259.0	257.1	193.6	256.9	258.0	257.3	257.0	257.0	Sbd box	257.3
Delay rate (us/s)	U/L 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	PC freqs	
	n 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.97686205042E+03		Apriori delay (usec)		-3.97686308121E+03		Resid mbdelay (usec)		1.03079E-03	+/- 8.8E-05
Sband delay (usec)	-3.97686192971E+03		Apriori clock (usec)		-3.3755482E+01		Resid sbdelay (usec)		1.15150E-03	+/- 7.0E-04
Phase delay (usec)	-3.97686308601E+03		Apriori clockrate (us/s)		-3.7599999E-07		Resid phdelay (usec)		-4.80457E-06	+/- 3.0E-07
Delay rate (us/s)	4.68541163871E-01		Apriori rate (us/s)		4.68541224184E-01		Resid rate (us/s)		-6.03138E-08	+/- 2.9E-09
Total phase (deg)			Apriori accel (us/s/s)		2.00559797209E-05		Resid phase (deg)		-149.0	+/- 9.3

	RMS	Theor.	Amplitude	0.340 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	41.6	21.9	Search (1024X32)	0.330	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	47.4	38.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	15.3	13.2	Inc. seg. avg.	0.404	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	19.8	23.1	Inc. frq. avg.	0.336	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

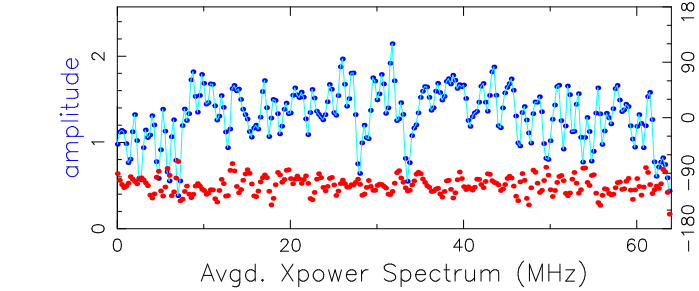
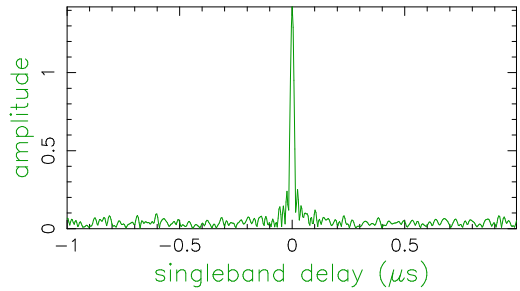
b: az 142.5 el 29.0 pa -24.1 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -2687.084 529.614 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/bn..1970YE Output file: /Exps/c201e/v1/1234/No0073/bn.W.75.1970YE



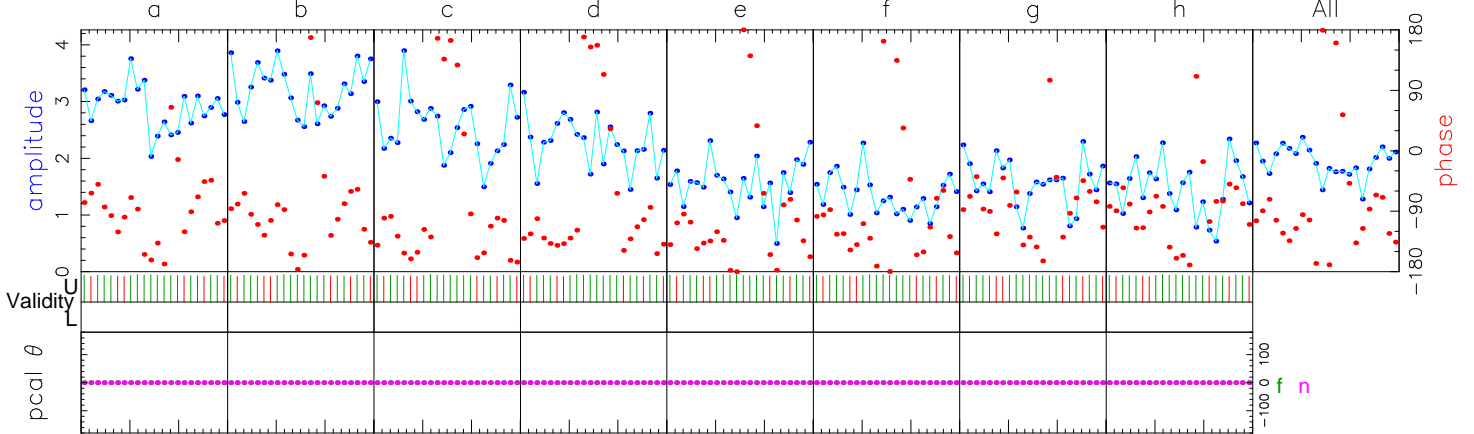
Fringe quality 2

SNR 51.1
Int time 173.005
Amp 1.422
Phase -112.8
PFD 0.0e+00
Delays (us)
SBD -0.000061
MBD 0.000232
Fringe rate (Hz)
0.006518
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155306
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

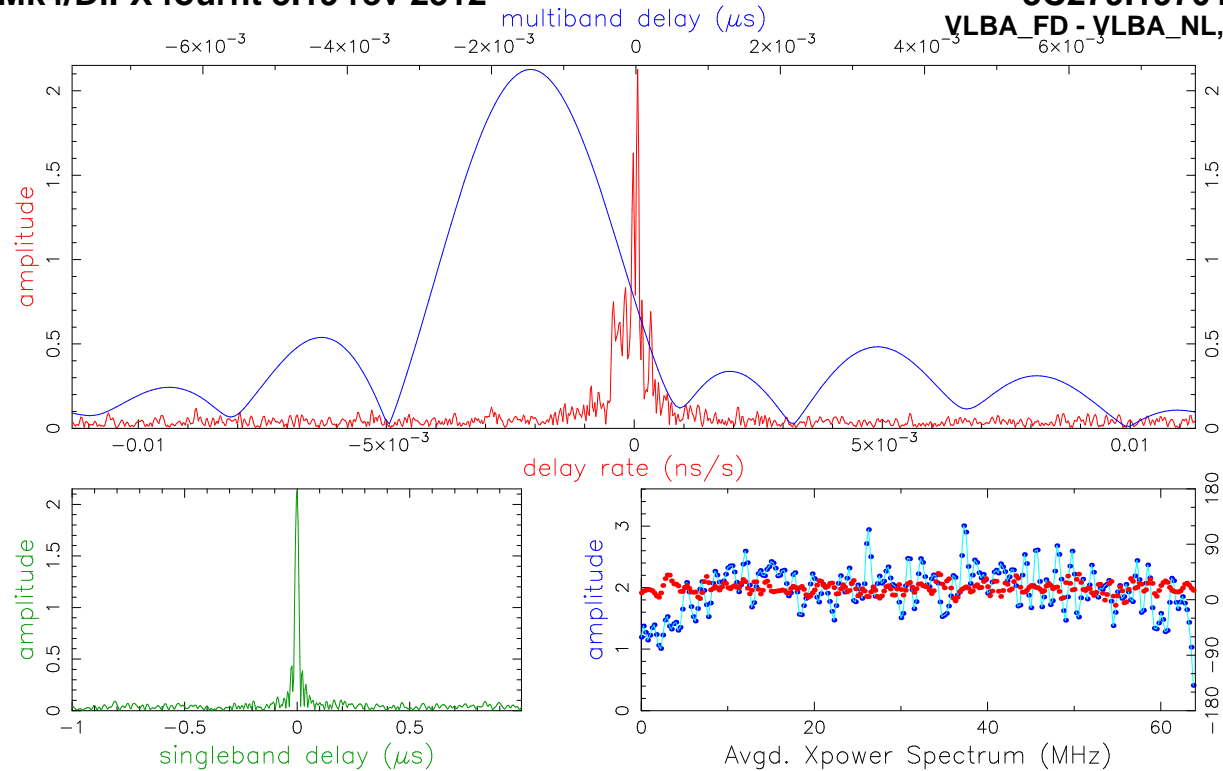


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-90.7	-103.0	-143.9	-135.0	-131.2	-124.7	-87.6	-92.3	Phase	-112.8
	2.1	2.3	1.8	1.6	1.1	1.0	1.2	1.1	Ampl.	1.5
	256.9	256.5	257.0	257.1	257.4	257.4	256.9	257.0	Sbd box	257.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 2.04071020960E+03 Apriori delay (usec) 2.04070997779E+03 Resid mbdelay (usec) 2.31805E-04 +/- 2.1E-05
 Sband delay (usec) 2.04070991654E+03 Apriori clock (usec) -2.8416714E+01 Resid sbdelay (usec) -6.12500E-05 +/- 1.7E-04
 Phase delay (usec) 2.04070997415E+03 Apriori clockrate (us/s) -2.2499998E-07 Resid phdelay (usec) -3.63904E-06 +/- 7.2E-08
 Delay rate (us/s) 2.94054576231E-01 Apriori rate (us/s) 2.94054500564E-01 Resid rate (us/s) 7.56669E-08 +/- 6.9E-10
 Total phase (deg) 62.5 Apriori accel (us/s/s) -9.18882073893E-06 Resid phase (deg) -112.8 +/- 2.2

RMS Theor. Amplitude 1.422 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.2 5.3 Search (1024X32) 1.335 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 41.1 9.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 24.4 3.2 Inc. seg. avg. 1.935 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 35.0 5.5 Inc. frq. avg. 1.523 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 153.6 el 50.1 pa -22.3 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -1698.399 -1304.409 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/fn..1970YE Output file: /Exps/c201e/v1/1234/No0073/fn.W.13.1970YE

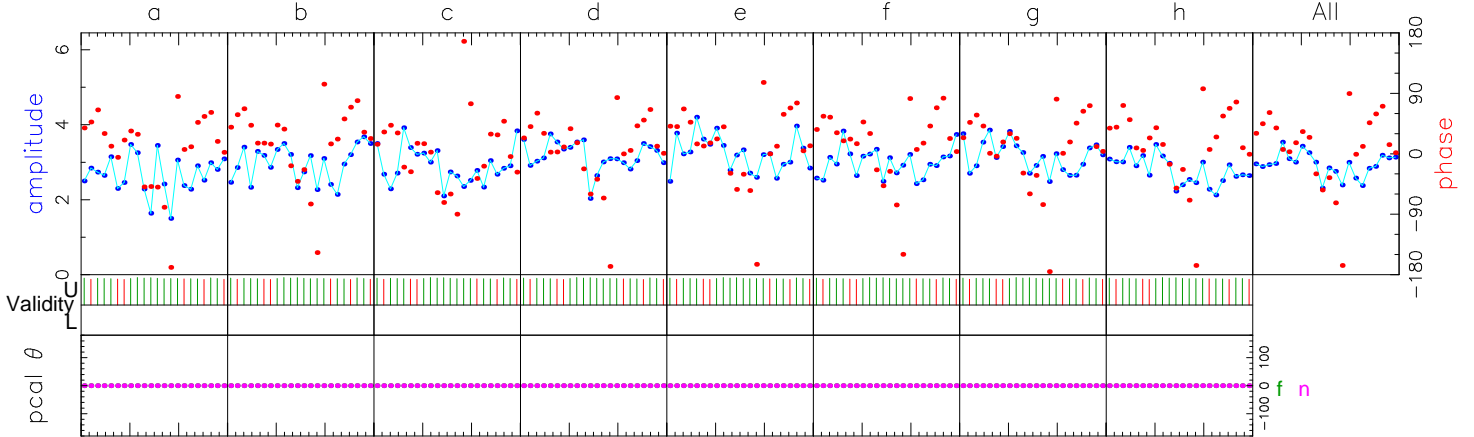


Fringe quality 6

SNR 77.4
Int time 173.005
Amp 2.151
Phase 20.1
PFD 0.0e+00
Delays (us)
SBD -0.001363
MBD -0.001491
Fringe rate (Hz) 0.006451
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155308
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

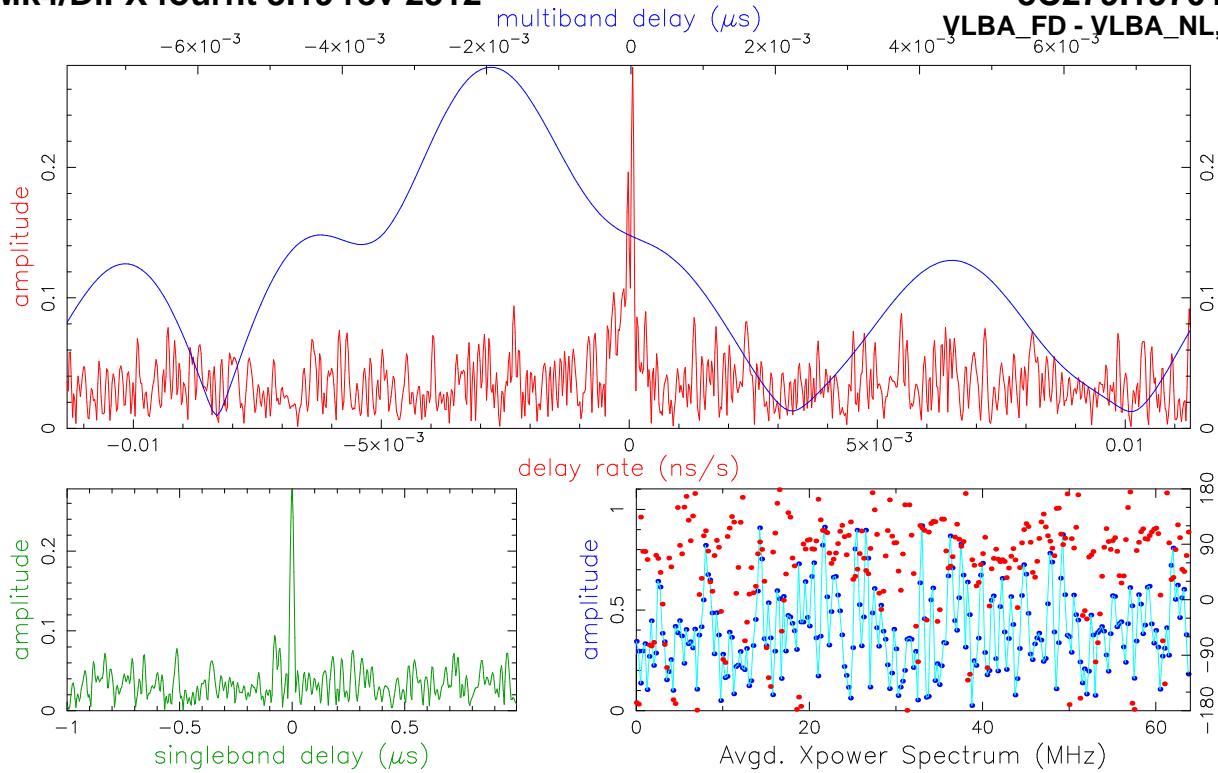
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		256.7		
f	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	2.2		
n	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	256.7		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used			
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC phase			
n	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC			
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp			
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
									Tracks			
									Tracks			
Group delay (usec)(sbd)	2.04070848672E+03					2.04070997779E+03			Resid mbdelay (usec)	-1.49107E-03 +/- 1.4E-05		
Sband delay (usec)	2.04070861479E+03					-2.8416714E+01			Resid sbdelay (usec)	-1.36300E-03 +/- 1.1E-04		
Phase delay (usec)	2.04070997844E+03					-2.2499998E-07			Resid phdelay (usec)	6.47268E-07 +/- 4.8E-08		
Delay rate (us/s)	2.94054575458E-01					2.94054500564E-01			Resid rate (us/s)	7.48945E-08 +/- 4.6E-10		
Total phase (deg)			195.4			-9.18882073893E-06			Resid phase (deg)	20.1 +/- 1.5		
	RMS	Theor.	Amplitude	2.151 +/- 0.028					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	54.1	3.5	Search (1024X32)	2.051					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	39.0	6.1	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	11.0	2.1	Inc. seg. avg.	2.927					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	6.5	3.7	Inc. frq. avg.	2.153					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

f: az 153.6 el 50.1 pa -22.3 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -1698.399 -1304.409 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/fn..1970YE Output file: /Exps/c201e/v1/1234/No0073/fn.W.29.1970YE

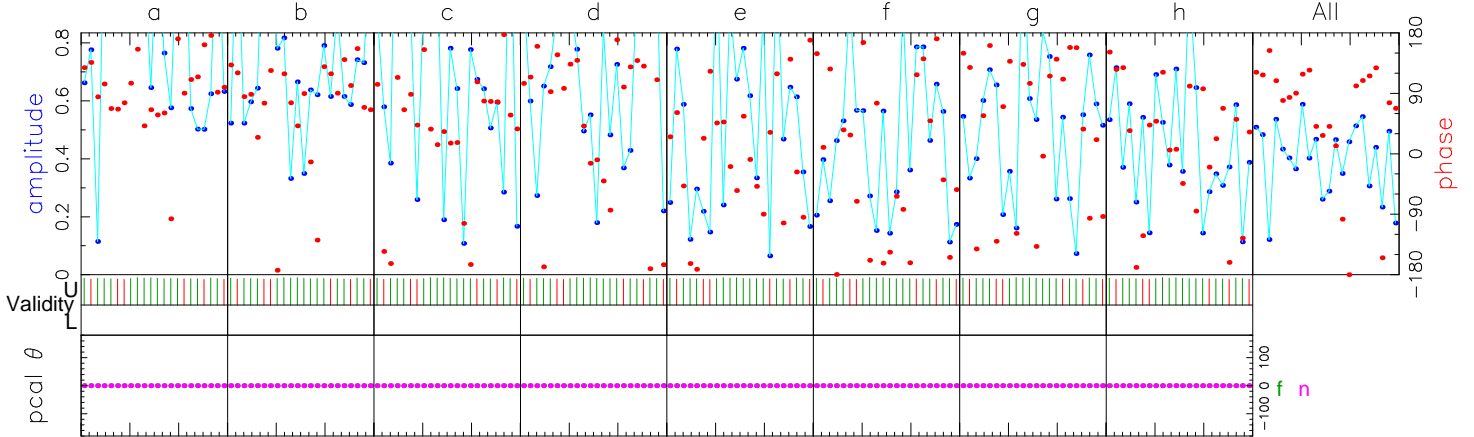


Fringe quality 9

SNR 10.0
Int time 173.004
Amp 0.278
Phase 100.3
PFD 3.0e-15
Delays (us)
SBD -0.000951
MBD -0.001955
Fringe rate (Hz) 0.006414
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

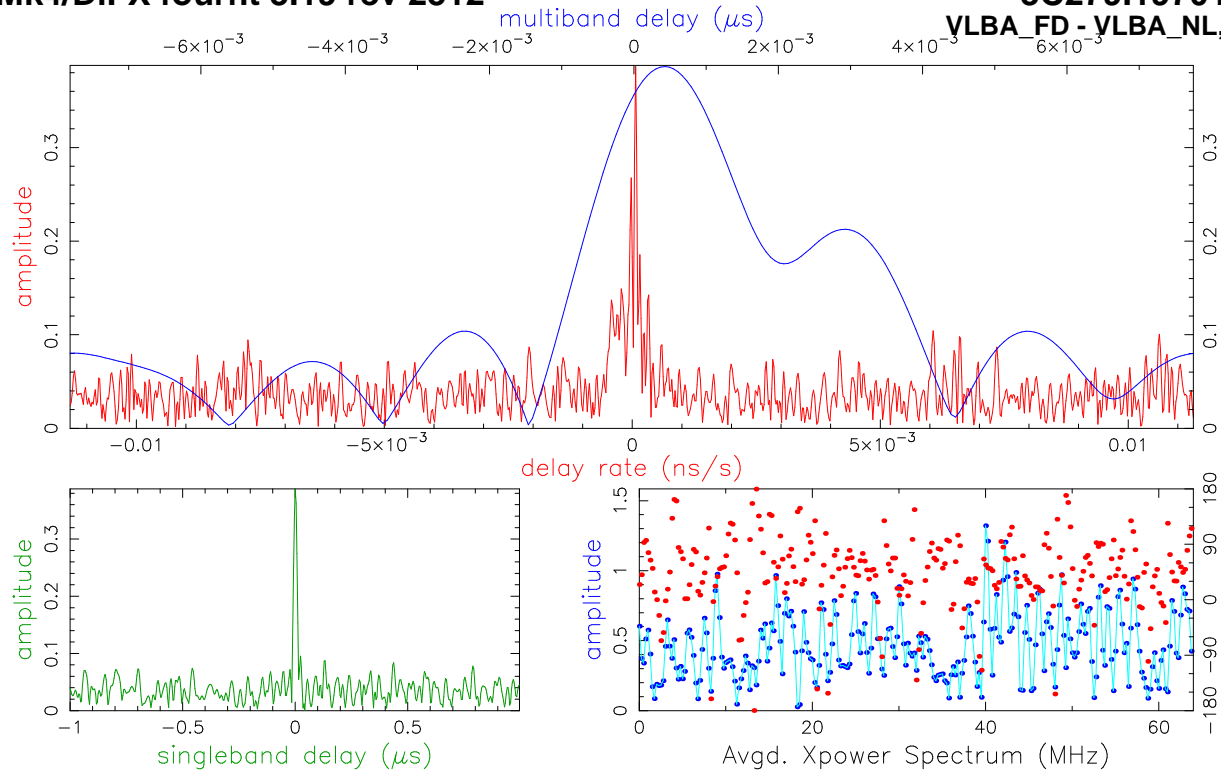
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build 2020:206:060053
2020:206:155310
2020:014:135814
RA & Dec (J2000) 12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.04070802291E+03		Apriori delay (usec)		2.04070997779E+03		Resid mbdelay (usec)		-1.95488E-03	+/- 1.1E-04
Sband delay (usec)	2.04070902679E+03		Apriori clock (usec)		-2.8416714E+01		Resid sbdelay (usec)		-9.51000E-04	+/- 8.6E-04
Phase delay (usec)	2.04070998103E+03		Apriori clockrate (us/s)		-2.2499998E-07		Resid phdelay (usec)		3.23560E-06	+/- 3.7E-07
Delay rate (us/s)	2.94054575023E-01		Apriori rate (us/s)		2.94054500564E-01		Resid rate (us/s)		7.44595E-08	+/- 3.5E-09
Total phase (deg)	275.7		Apriori accel (us/s/s)		-9.18882073893E-06		Resid phase (deg)		100.3	+/- 11.5

ph/seg (deg) 57.5 26.9 Search (1024X32) 0.270 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.6 46.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.5 16.2 Inc. seg. avg. 0.362 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 72.6 28.3 Inc. frq. avg. 0.309 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 153.6 el 50.1 pa -22.3 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -1698.399 -1304.409 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/fn...1970YE Output file: /Exps/c201e/v1/1234/No0073/fn.W.40.1970YE

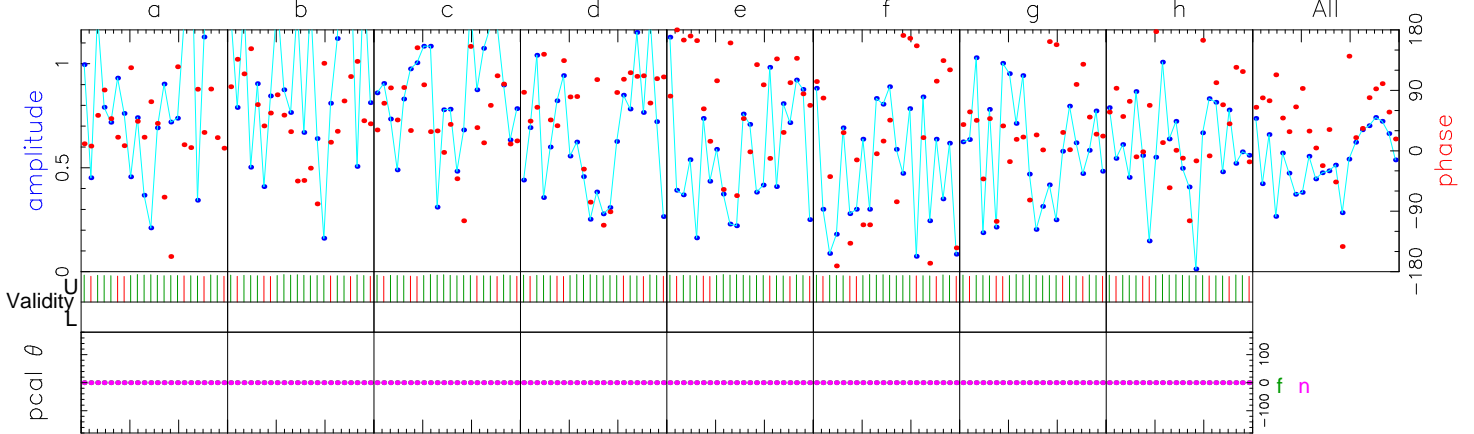


Fringe quality 9

SNR 13.9
Int time 173.005
Amp 0.388
Phase 54.8
PFD 9.7e-36
Delays (us)
SBD 0.000701
MBD 0.000441
Fringe rate (Hz) 0.006506
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155311
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

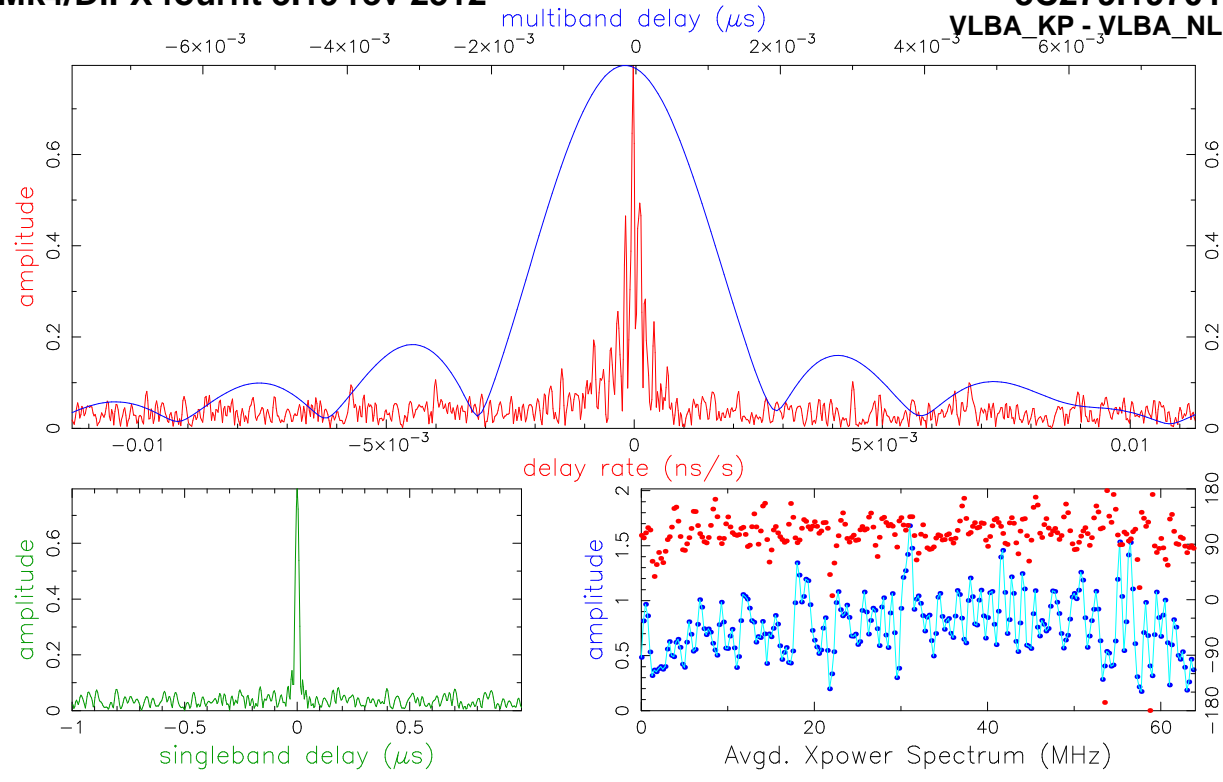


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		2.04071041869E+03			2.04070997779E+03				4.40899E-04	+/- 7.8E-05
Sband delay (usec)		2.04071067854E+03			-2.8416714E+01				7.00750E-04	+/- 6.2E-04
Phase delay (usec)		2.04070997956E+03			-2.2499998E-07				1.76641E-06	+/- 2.6E-07
Delay rate (us/s)		2.94054576095E-01			2.94054500564E-01				7.55308E-08	+/- 2.5E-09
Total phase (deg)			230.1		-9.18882073893E-06				54.8	+/- 8.2
pcal mode:					MANUAL, MANUAL				PC period (AP's)	5, 5
pcal rate:					0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
Bits/sample:					2x2				SampCntNorm: enabled	mb window (us) -0.008 0.008
Sample rate (MSamp/s):					128				dr window (ns/s)	-0.011 0.011
Data rate (Mb/s):					2048				nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

ph/seg (deg) 55.6 19.3 Search (1024X32) 0.388 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.0 33.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.2 11.6 Inc. seg. avg. 0.510 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.2 20.3 Inc. frq. avg. 0.403 Sample rate (MSamp/s): 128 dr window (ns/s) -0.011 0.011
 f: az 153.6 el 50.1 pa -22.3 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -1698.399 -1304.409 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/fn..1970YE Output file: /Exps/c201e/v1/1234/No0073/fn.W.51.1970YE simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, kn
VLBA_KP - VLBA_NL, fgroup W, pol LL

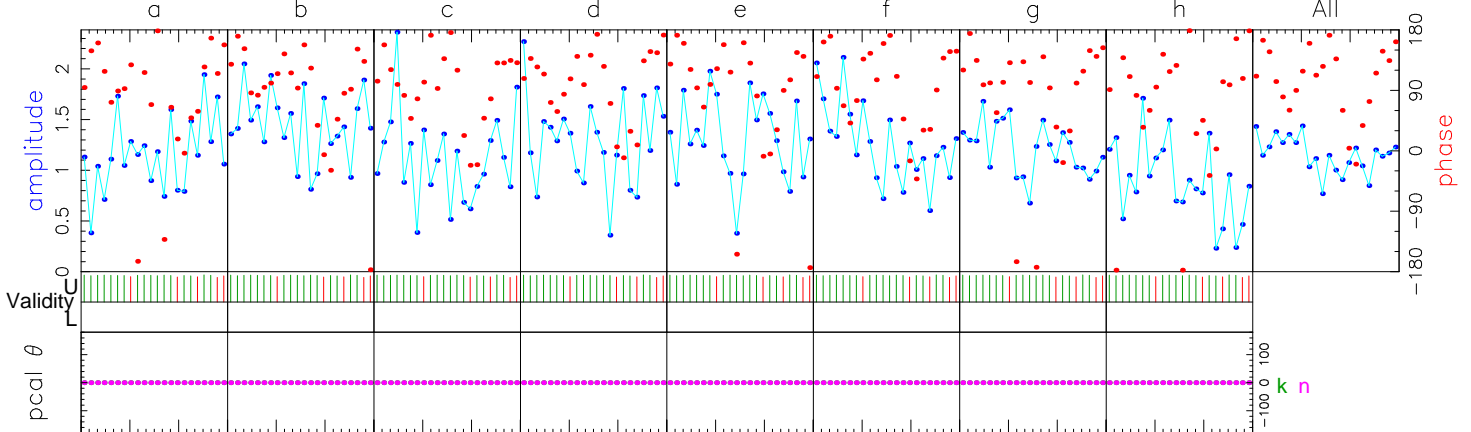


Fringe quality 7

SNR 28.6
Int time 172.547
Amp 0.795
Phase 111.0
PFD 0.0e+00
Delays (us)
SBD -0.000124
MBD -0.000151
Fringe rate (Hz)
-0.002236
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

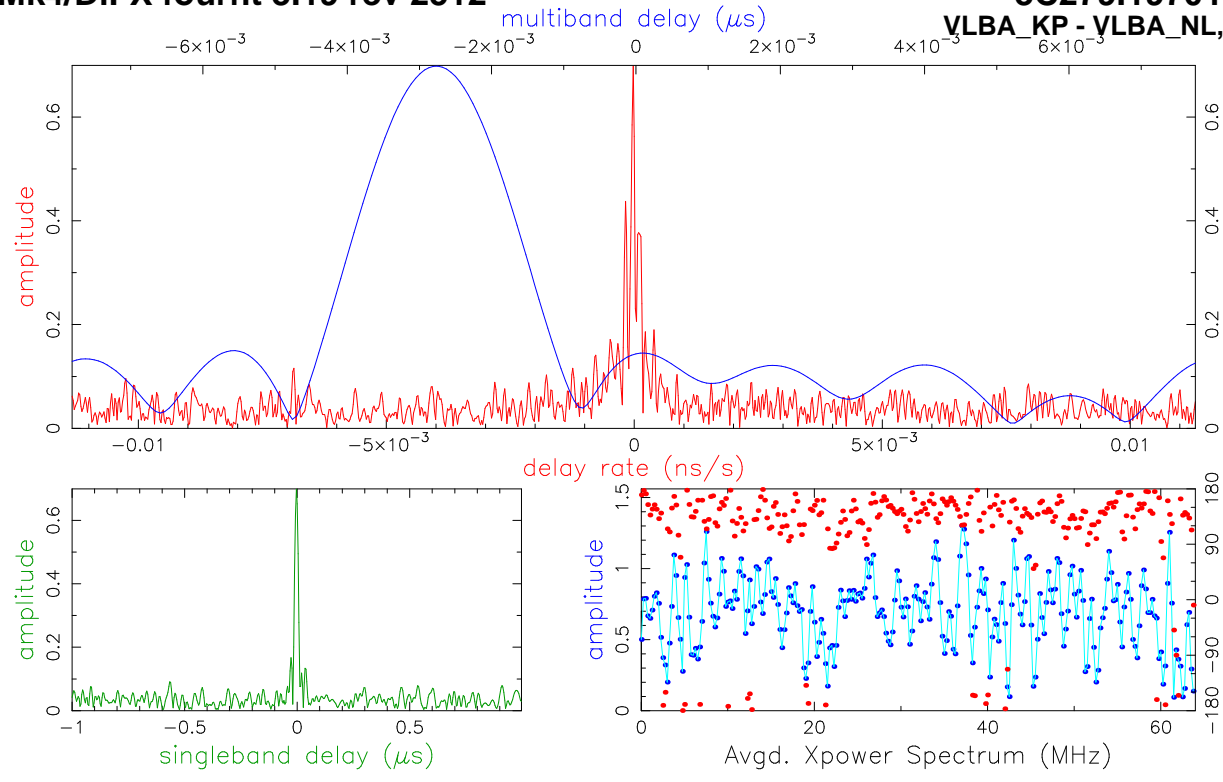
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155307
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	109.3	113.2	107.1	111.0	115.4	108.6	115.8	104.4		
Sband delay (usec)	0.8	1.0	0.8	0.9	0.8	0.8	0.8	0.5		
Phase delay (usec)	256.6	256.7	256.7	257.1	257.2	257.8	257.0	256.4		
Delay rate (us/s)	4.53525669320E-01									
Total phase (deg)			223.1							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
k n										
Chans										
Tracks										
Chans										
Tracks										
RMS	51.1	9.4								
Theor.										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
ph/seg (deg)										
amp/seg (%)										
ph/frq (deg)										
amp/frq (%)										
k: az 144.1 el 45.6 pa -29.6										
n: az 174.2 el 42.2 pa -4.2										
u,v (fr/asec)										
simultaneous interpolator										

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/kn..1970YE Output file: /Exps/c201e/v1/1234/No0073/kn.W.24.1970YE

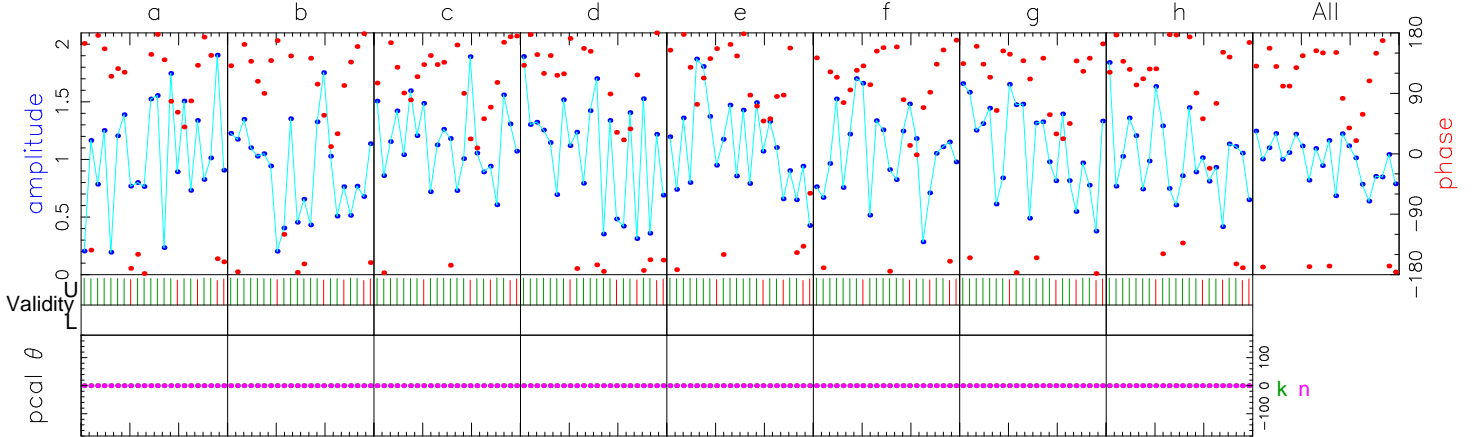


Fringe quality 7

SNR 25.1
Int time 172.547
Amp 0.700
Phase 137.0
PFD 0.0e+00
Delays (us)
SBD -0.003341
MBD -0.002754
Fringe rate (Hz)
-0.002459
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155310
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

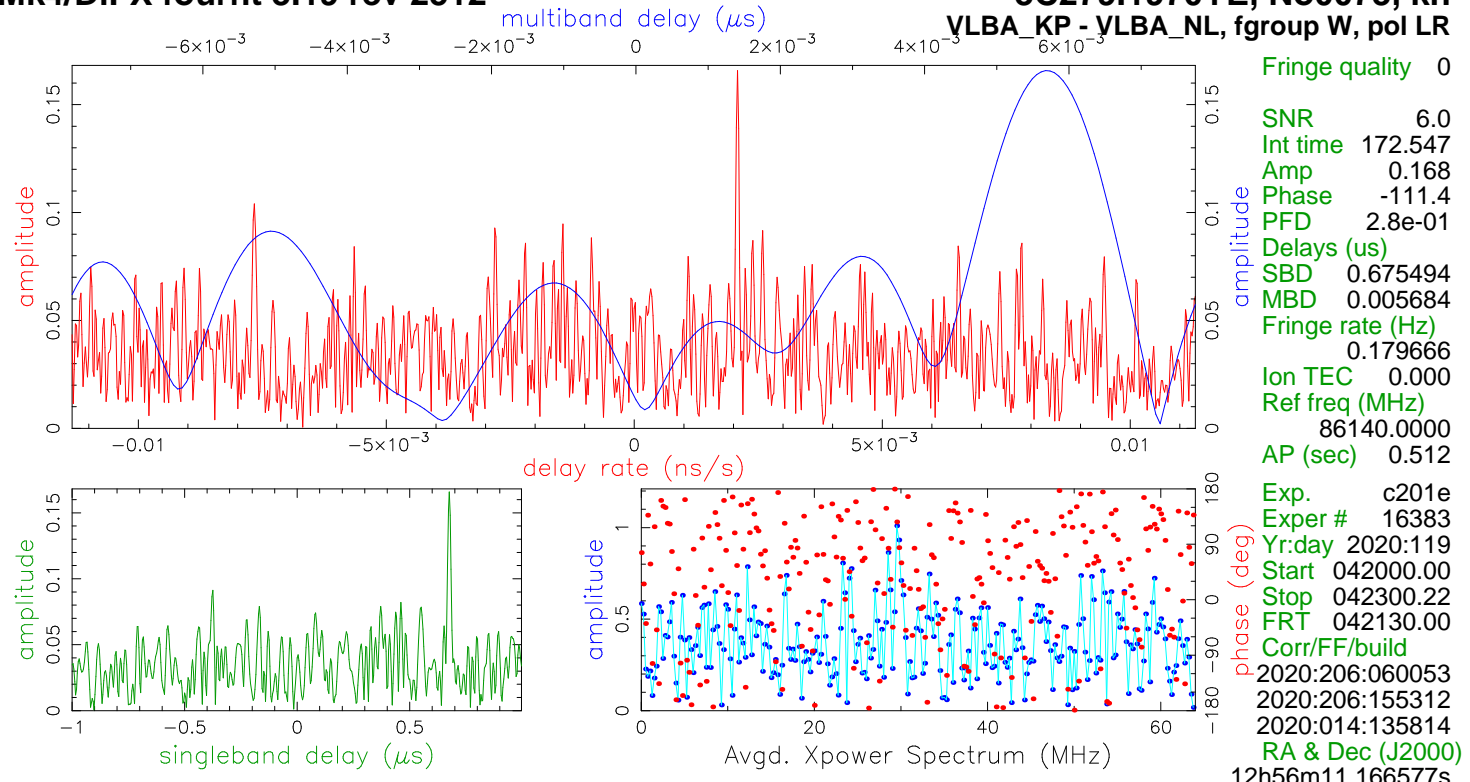
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



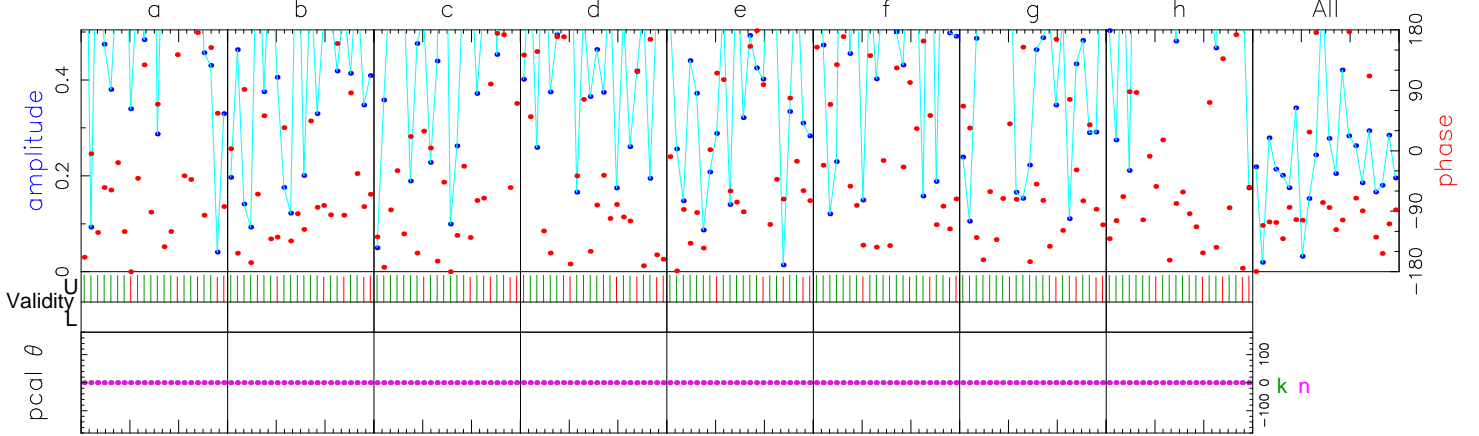
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		9.25187707115E+02			9.25190461008E+02					
Sband delay (usec)		9.25187119758E+02			-3.2679428E+01					
Phase delay (usec)		9.25190465425E+02			-3.2859999E-07					
Delay rate (us/s)		4.53525666731E-01			4.53525695280E-01					
Total phase (deg)			249.0		-3.50824352680E-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)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.700 +/- 0.028										
0.678										
0.000										
0.983										
0.703										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										

Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, kn
VLBA_KP - VLBA_NL, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-116.3	-86.1	-91.5	-157.0	-84.4	-158.4	-96.1	-107.5	Phase	-111.4
	0.3	0.2	0.1	0.2	0.1	0.1	0.2	0.3	Ampl.	0.2
	430.1	161.1	419.3	237.1	73.5	225.7	510.5	428.1	Sbd box	429.9
U/L	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	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	9.25868019519E+02		Apriori delay (usec)		9.25190461008E+02		Resid mbdelay (usec)		5.68351E-03	+/- 1.8E-04
Sband delay (usec)	9.25865955258E+02		Apriori clock (usec)		-3.2679428E+01		Resid sbdelay (usec)		6.75494E-01	+/- 1.4E-03
Phase delay (usec)	9.25190457415E+02		Apriori clockrate (us/s)		-3.2859999E-07		Resid phdelay (usec)		-3.59334E-06	+/- 6.2E-07
Delay rate (us/s)	4.53527781020E-01		Apriori rate (us/s)		4.53525695280E-01		Resid rate (us/s)		2.08574E-06	+/- 6.0E-09
Total phase (deg)	0.6		Apriori accel (us/s/s)		-3.50824352680E-06		Resid phase (deg)		-111.4	+/- 19.2

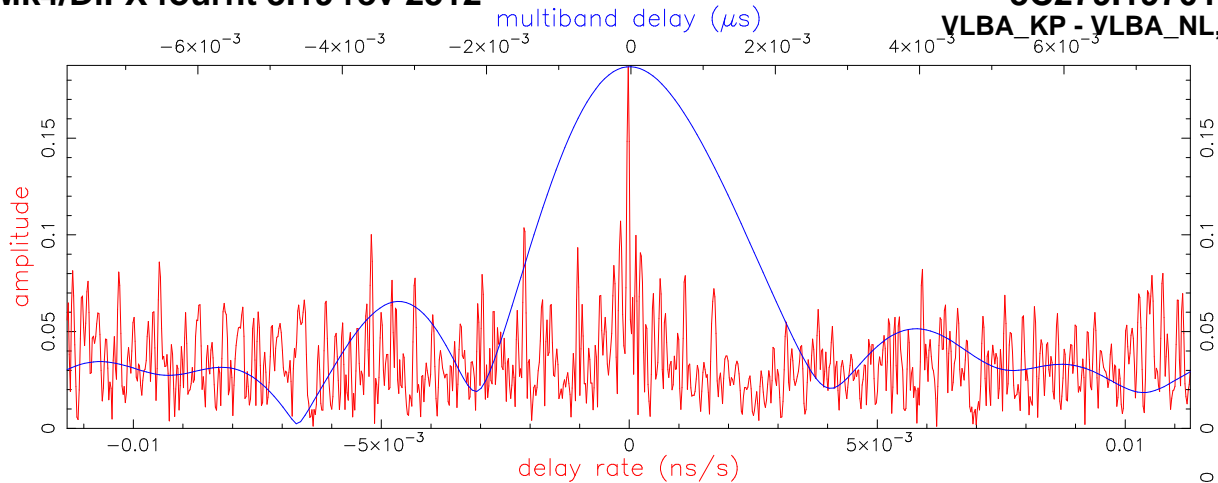
	RMS	Theor.	Amplitude	0.168 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.6	45.1	Search (1024X32)	0.161	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	82.8	78.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	32.5	27.2	Inc. seg. avg.	0.184	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	47.9	47.5	Inc. frq. avg.	0.166	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 144.1 el 45.6 pa -29.6 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -2613.582 -1176.938 simultaneous interpolator

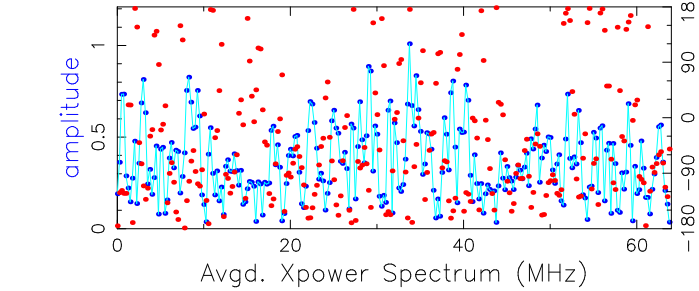
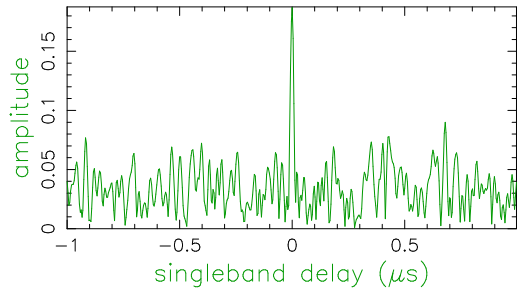
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/kn..1970YE Output file: /Exps/c201e/v1/1234/No0073/kn.W.54.1970YE

Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, kn
VLBA_KP - VLBA_NL, fgroup W, pol RL

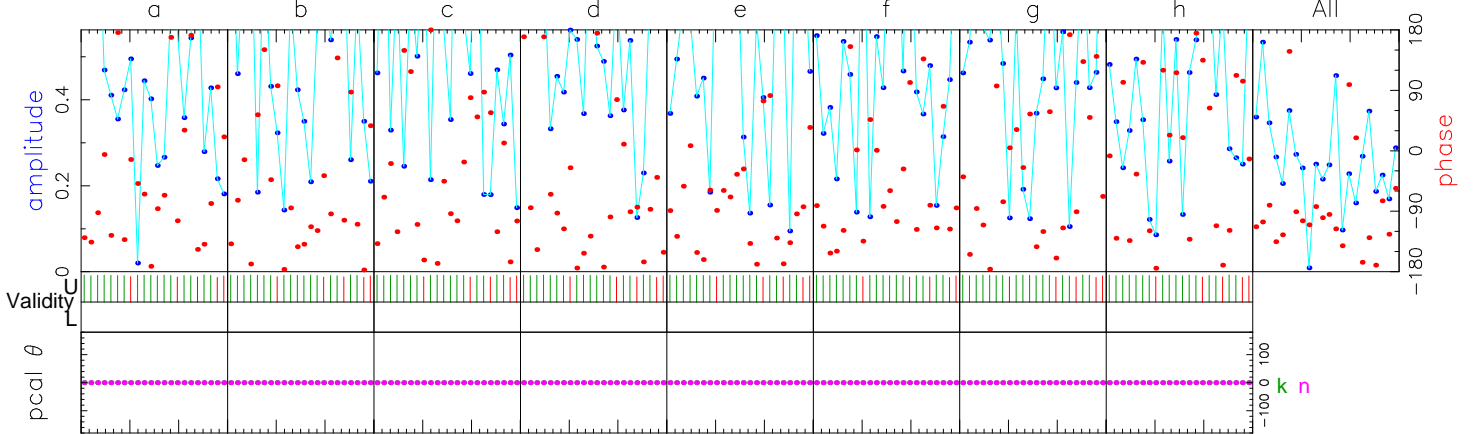


Fringe quality 0
SNR 6.7
Int time 172.547
Amp 0.188
Phase -113.8
PFD 2.3e-03
Delays (us)
SBD -0.000752
MBD -0.000046
Fringe rate (Hz)
-0.002619
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155314
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"



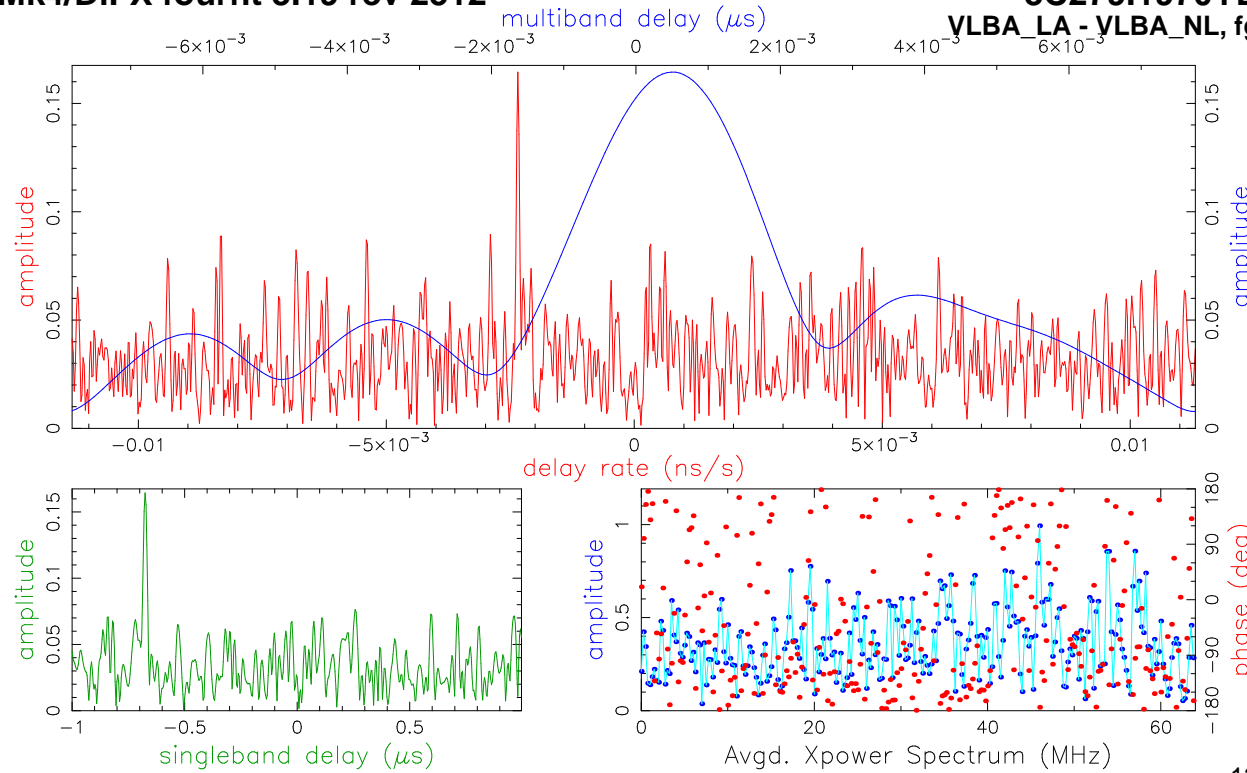
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



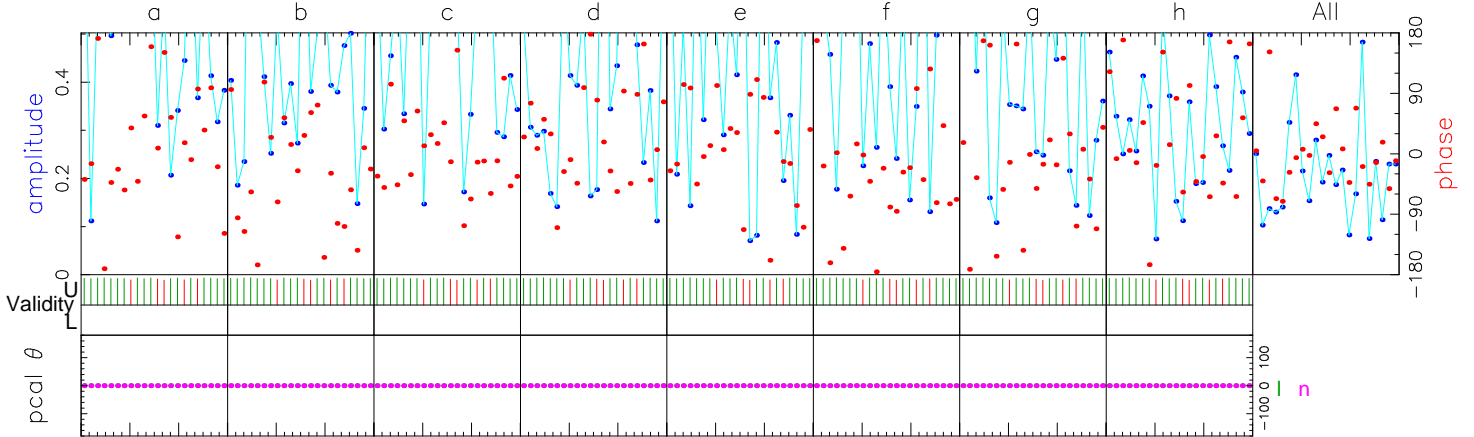
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	9.25190415021E+02				9.25190461008E+02					
Sband delay (usec)	9.25189708758E+02				-3.2679428E+01					
Phase delay (usec)	9.25190457338E+02				-3.2859999E-07					
Delay rate (us/s)	4.53525664876E-01				4.53525695280E-01					
Total phase (deg)			-1.8		-3.50824352680E-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)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude				0.188 +/- 0.028						
Search (1024X32)				0.182						
Interp.				0.000						
Inc. seg. avg.				0.212						
Inc. frq. avg.				0.189						
PCamp										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
Amplitude				0.188 +/- 0.028						
Search (1024X32)				0.182						
Interp.				0.000						
Inc. seg. avg.				0.212						
Inc. frq. avg.				0.189						
PCamp										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

k: az 144.1 el 45.6 pa -29.6 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -2613.582 -1176.938 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/kn..1970YE Output file: /Exps/c201e/v1/1234/No0073/kn.W.64.1970YE



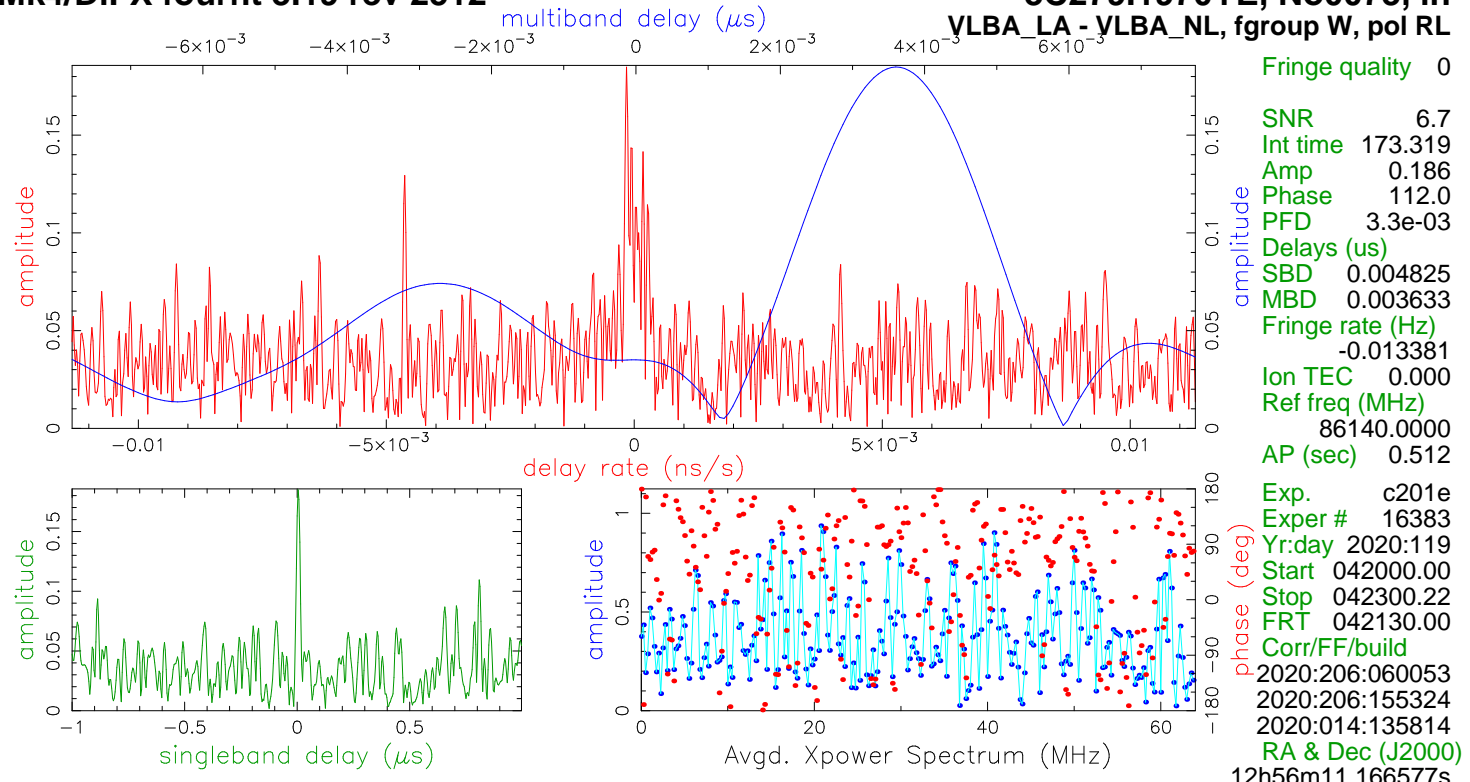
Fringe quality 0
 SNR 5.9
 Int time 173.318
 Amp 0.168
 Phase -6.6
 PFD 3.3e-01
 Delays (us)
 SBD -0.675333
 MBD 0.000528
 Fringe rate (Hz)
 -0.201736
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 042000.00
 Stop 042300.22
 FRT 042130.00
 Corr/FF/build
 2020:206:06053
 2020:206:155323
 2020:014:135814
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

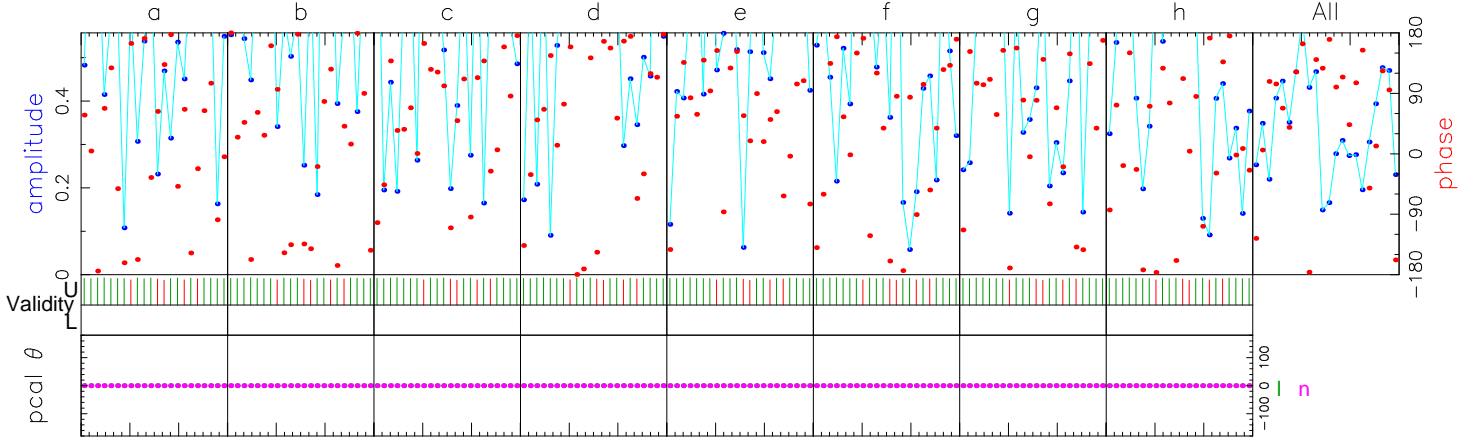


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		6.68659579154E+02				6.69330926480E+02			5.27675E-04	+/- 1.8E-04
Sband delay (usec)		6.68655593480E+02				-3.6075802E+01			-6.75333E-01	+/- 1.5E-03
Phase delay (usec)		6.69330926266E+02				-4.8500001E-07			-2.13943E-07	+/- 6.2E-07
Delay rate (us/s)		3.20934612815E-01				3.20936954775E-01			-2.34196E-06	+/- 6.0E-09
Total phase (deg)			-4.1			-2.80710279778E-06			-6.6	+/- 19.3
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 50.3 45.4 Search (1024X32) 0.159 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.2 79.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.2 27.3 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.7 47.7 Inc. frq. avg. 0.167 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 153.0 el 44.7 pa -21.4 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -1849.600 -694.996 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/ln..1970YE Output file: /Exps/c201e/v1/1234/No0073/ln.W.123.1970YE



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

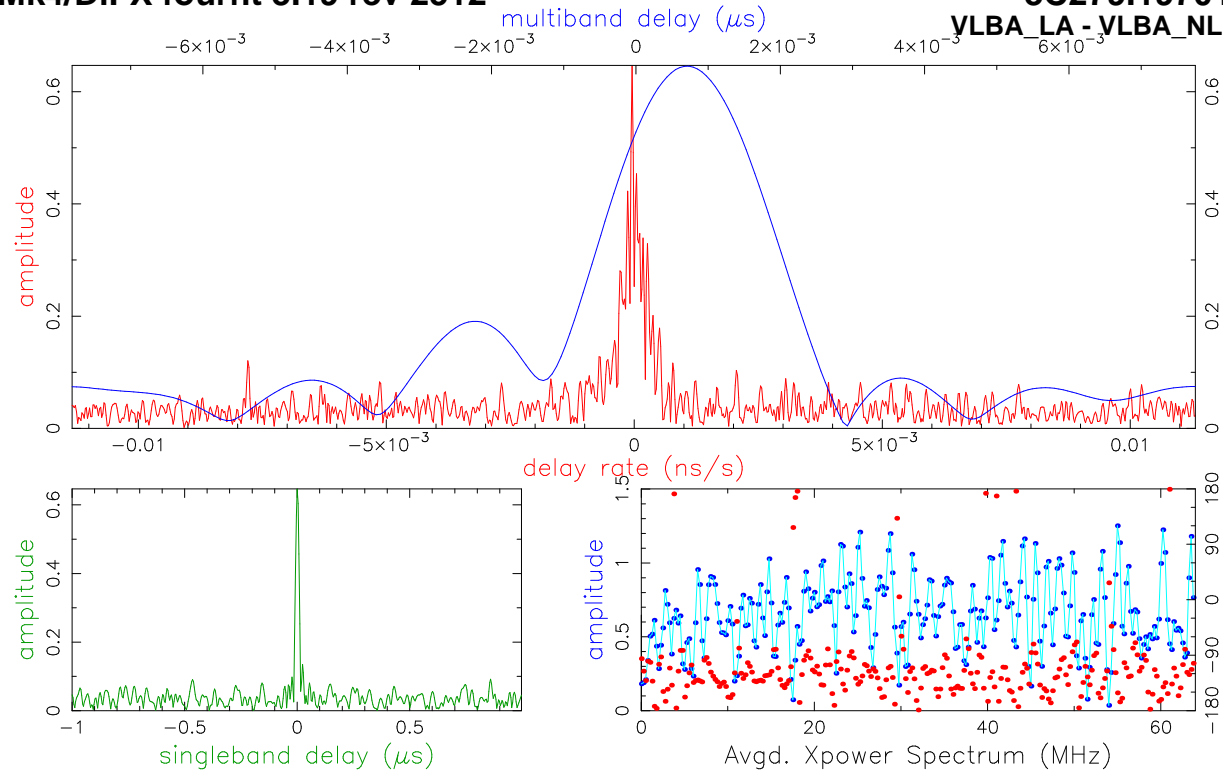


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
73.9	123.1	105.4	144.0	80.4	80.4	134.5	121.6	77.7	Phase	112.0
0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.1	Ampl.	0.2
234.5	371.3	341.6	259.4	258.5	45.0	257.1	500.0	500.0	Sbd box	258.2
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n 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	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000		
l W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
n W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.69334559476E+02		Apriori delay (usec)	6.69330926480E+02		Resid mbdelay (usec)	3.63300E-03	+/-	1.6E-04	
Sband delay (usec)	6.69335751730E+02		Apriori clock (usec)	-3.6075802E+01		Resid sbdelay (usec)	4.82525E-03	+/-	1.3E-03	
Phase delay (usec)	6.69330930093E+02		Apriori clockrate (us/s)	-4.8500001E-07		Resid phdelay (usec)	3.61328E-06	+/-	5.5E-07	
Delay rate (us/s)	3.20936799434E-01		Apriori rate (us/s)	3.20936954775E-01		Resid rate (us/s)	-1.55341E-07	+/-	5.3E-09	
Total phase (deg)		114.6	Apriori accel (us/s/s)	-2.80710279778E-06		Resid phase (deg)	112.0	+/-	17.1	

	RMS	Theor.	Amplitude	0.186 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	66.6	40.2	Search (1024X32)	0.182	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	104.4	70.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	30.1	24.2	Inc. seg. avg.	0.274	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.8	42.3	Inc. frq. avg.	0.186	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

l: az 153.0 el 44.7 pa -21.4 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -1849.600 -694.996 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/ln..1970YE Output file: /Exps/c201e/v1/1234/No0073/ln.W.134.1970YE

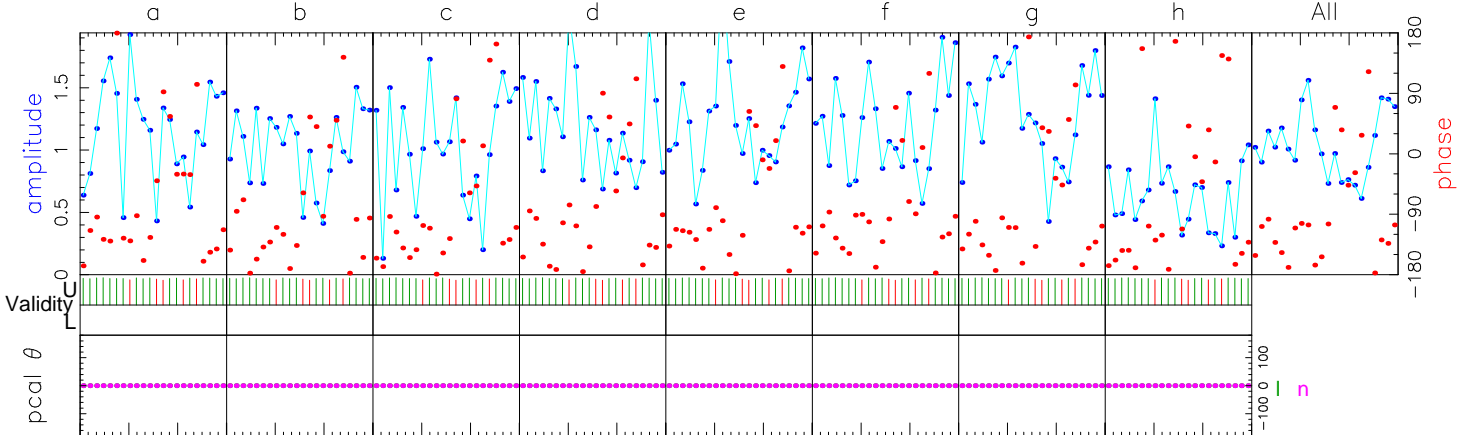


Fringe quality 9

SNR 23.3
 Int time 173.318
 Amp 0.647
 Phase -126.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.000594
 MBD 0.000717
 Fringe rate (Hz)
 -0.004104
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 042000.00
 Stop 042300.22
 FRT 042130.00
 Corr/FF/build
 2020:206:060053
 2020:206:155317
 2020:014:135814
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

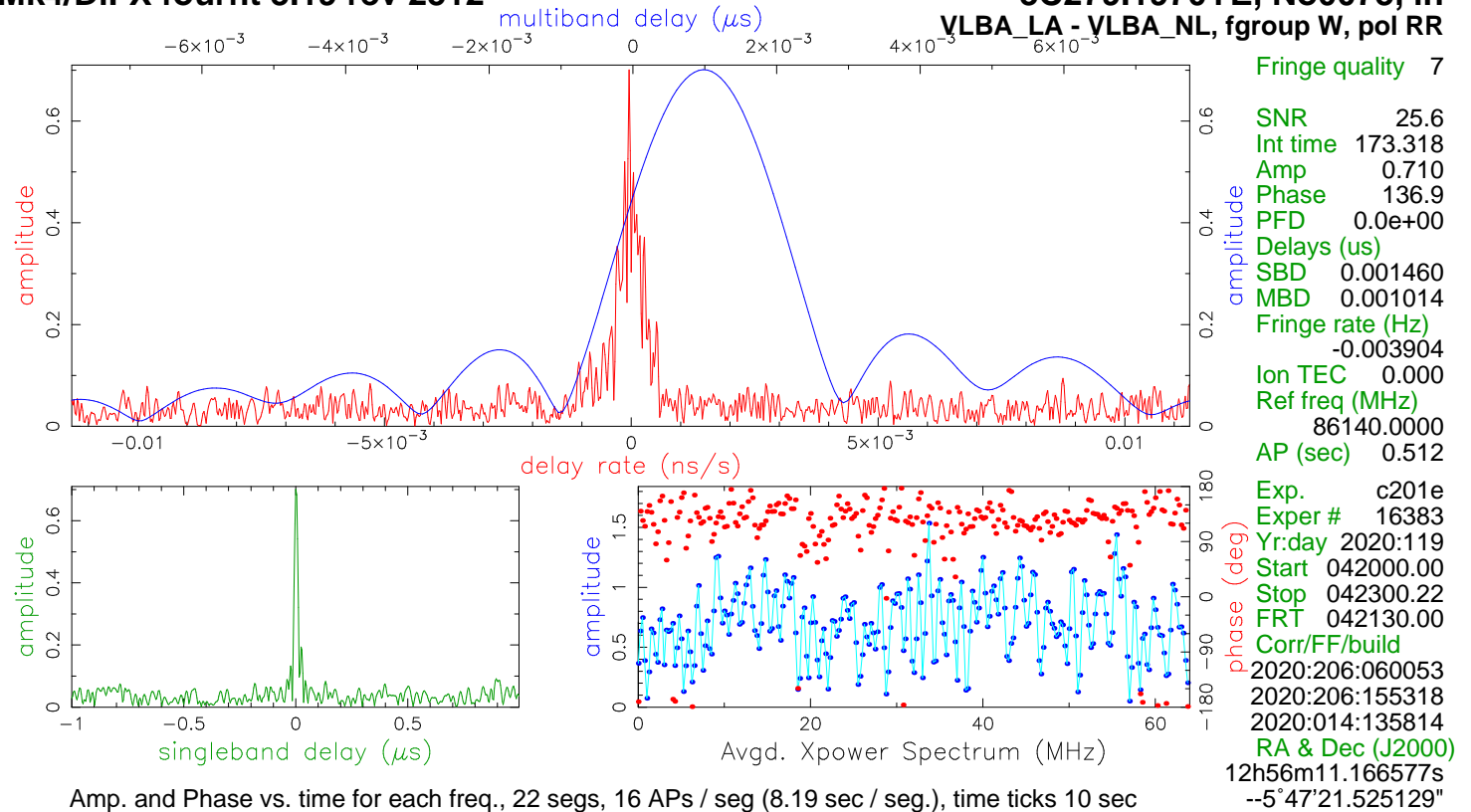
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



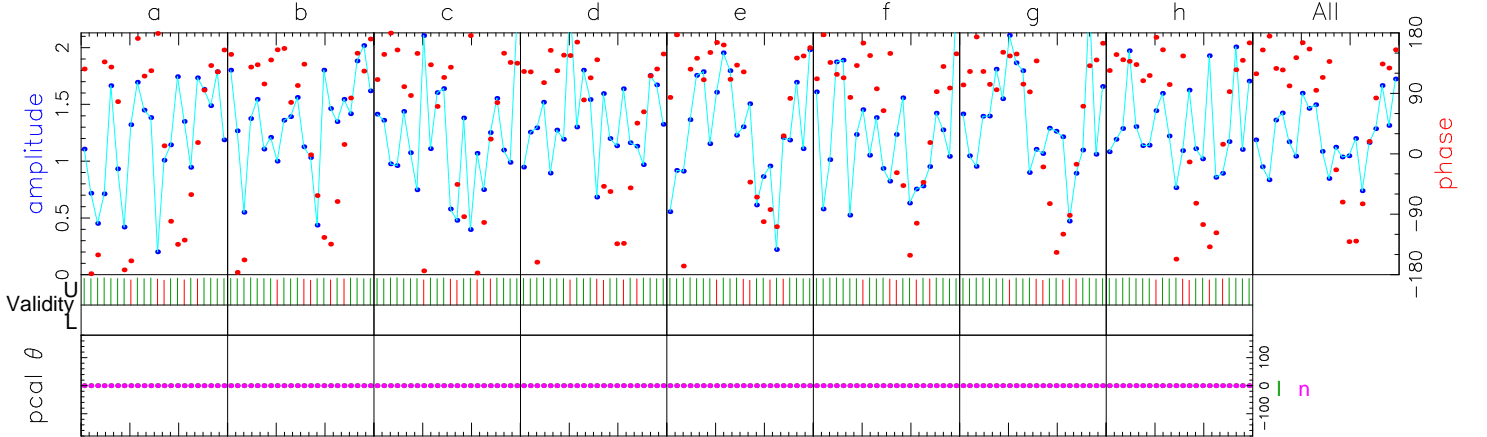
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	6.69331643474E+02	Apriori delay (usec)	6.69330926480E+02	Resid mbdelay (usec)	7.16994E-04	+/-	4.7E-05
Sband delay (usec)	6.69331520980E+02	Apriori clock (usec)	-3.6075802E+01	Resid sbdelay (usec)	5.94500E-04	+/-	3.7E-04
Phase delay (usec)	6.69330922396E+02	Apriori clockrate (us/s)	-4.8500001E-07	Resid phdelay (usec)	-4.08399E-06	+/-	1.6E-07
Delay rate (us/s)	3.20936907126E-01	Apriori rate (us/s)	3.20936954775E-01	Resid rate (us/s)	-4.76491E-08	+/-	1.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.80710279778E-06	Resid phase (deg)	-126.6	+/-	4.9

ph/seg (deg)	72.3	RMS	11.5	Theor.	11.5	Amplitude	0.647 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	73.4	Search (1024X32)	0.629	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	10.9	Inc. seg. avg.	1.025	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	21.1	Inc. frq. avg.	0.648	u,v (fr/asec)	-1849.600 -694.996								

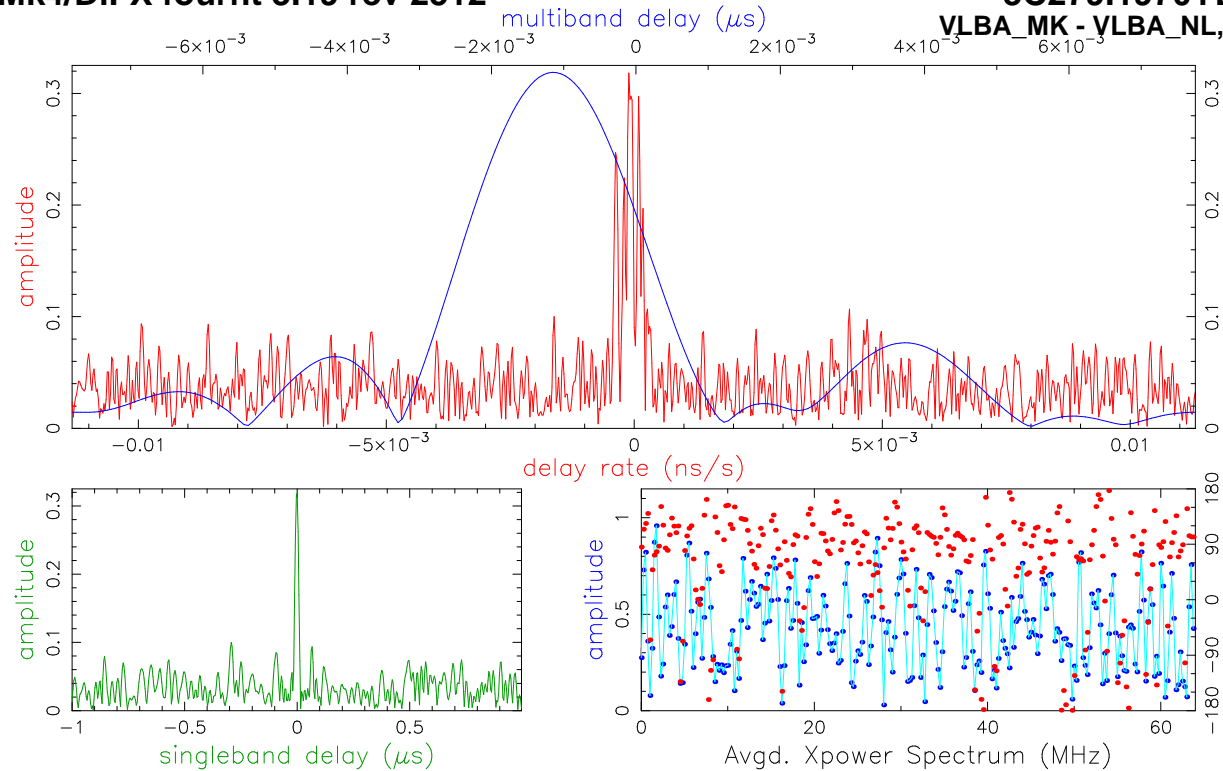


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	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	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	6.69331940318E+02		Apriori delay (usec)		6.69330926480E+02		Resid mbdelay (usec)		1.01384E-03	+/- 4.2E-05
Sband delay (usec)	6.69332386730E+02		Apriori clock (usec)		-3.6075802E+01		Resid sbdelay (usec)		1.46025E-03	+/- 3.4E-04
Phase delay (usec)	6.69330930896E+02		Apriori clockrate (us/s)		-4.8500001E-07		Resid phdelay (usec)		4.41593E-06	+/- 1.4E-07
Delay rate (us/s)	3.20936909456E-01		Apriori rate (us/s)		3.20936954775E-01		Resid rate (us/s)		-4.53193E-08	+/- 1.4E-09
Total phase (deg)			139.5		Apriori accel (us/s/s)		-2.80710279778E-06		Resid phase (deg)	136.9 +/- 4.5

ph/seg (deg) 71.0 10.5 Search (1024X32) 0.700 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 80.4 18.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.6 6.3 Inc. seg. avg. 1.197 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.6 11.1 Inc. frq. avg. 0.704 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 153.0 el 44.7 pa -21.4 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -1849.600 -694.996 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/ln..1970YE Output file: /Exps/c201e/v1/1234/No0073/ln.W.95.1970YE

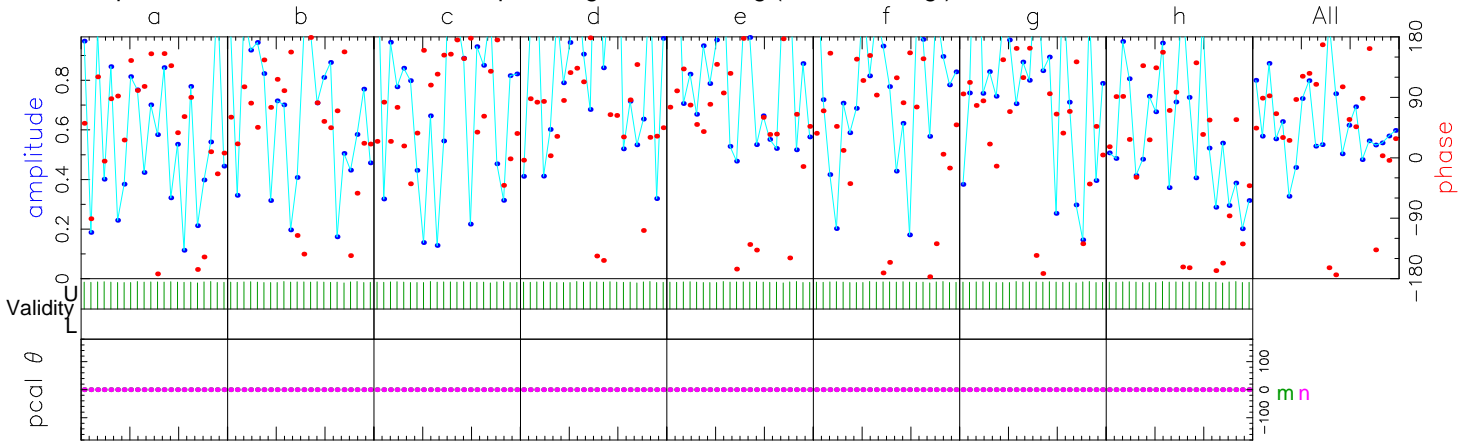


Fringe quality 9

SNR 11.8
Int time 176.358
Amp 0.325
Phase 91.9
PFD 9.1e-24
Delays (us)
SBD -0.001830
MBD -0.001218
Fringe rate (Hz)
-0.009428
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155319
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

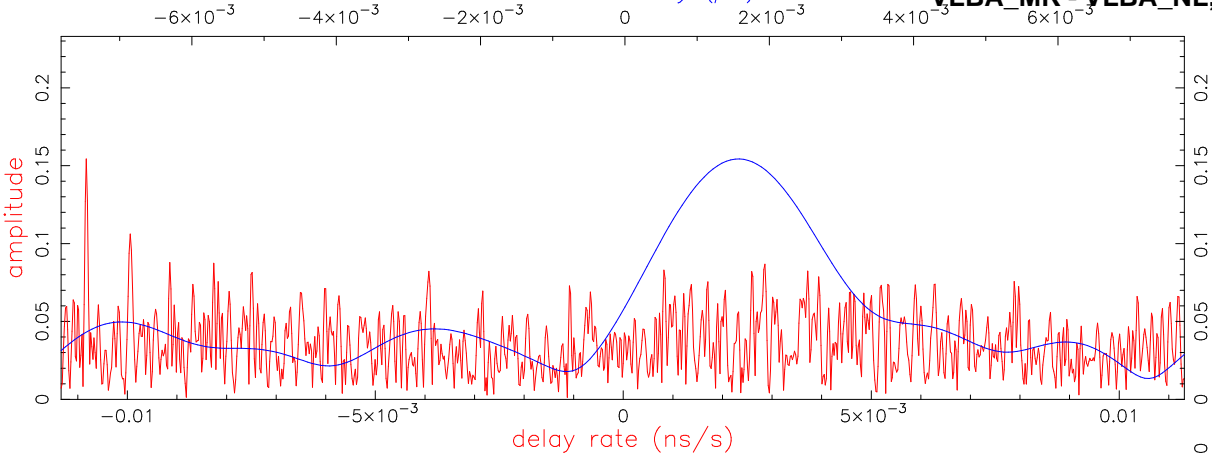


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-7.54787384895E+03									
Sband delay (usec)	-7.54787446120E+03									
Phase delay (usec)	-7.54787262823E+03									
Delay rate (us/s)	1.26697006647E+00									
Total phase (deg)			-70.6							
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)									91.9	+/- 9.2E-05
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate(MISamp/s):	128									
Data rate(Mb/s):	2048									
nlags:	256									
t_cohere	infinite									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

m: az 103.5 el 18.3 pa -66.8 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -7273.703 -3236.878 simultaneous interpolator

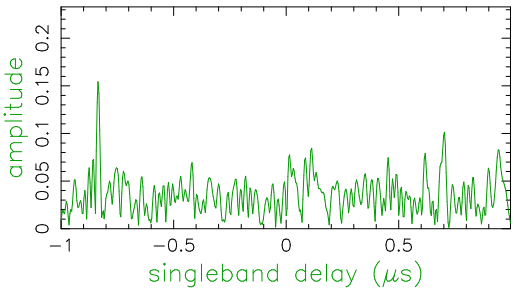
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/mn..1970YE Output file: /Exps/c201e/v1/1234/No0073/mn.W.100.1970YE

multiband delay (μ s)

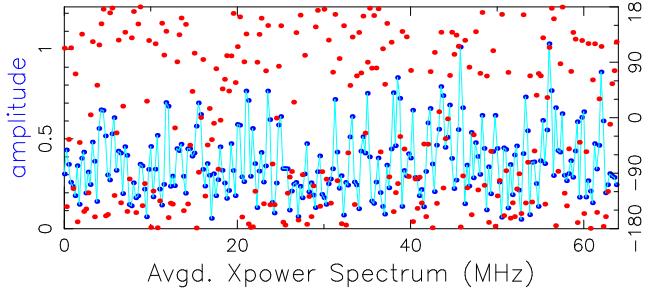


Fringe quality 0

SNR 5.6
Int time 176.358
Amp 0.233
Phase -109.4
PFD 9.1e-01
Delays (us)
SBD -0.835401
MBD 0.001592
Fringe rate (Hz)
-0.934400
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

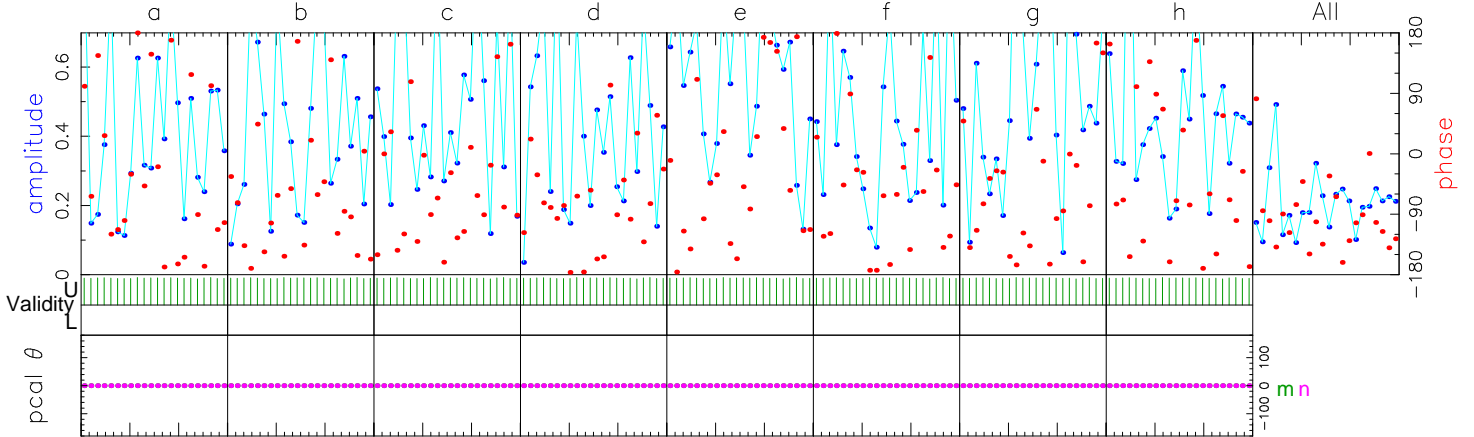


delay rate (ns/s)



Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:06053
2020:206:155322
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-168.2	-96.5	-104.0	-81.8	-131.9	-77.0	-110.1	-157.0	Phase	-109.4
	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	Ampl.	0.2
	127.6	138.3	383.7	37.4	169.7	387.5	32.8	180.5	Sbd box	43.1
U/L	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	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	

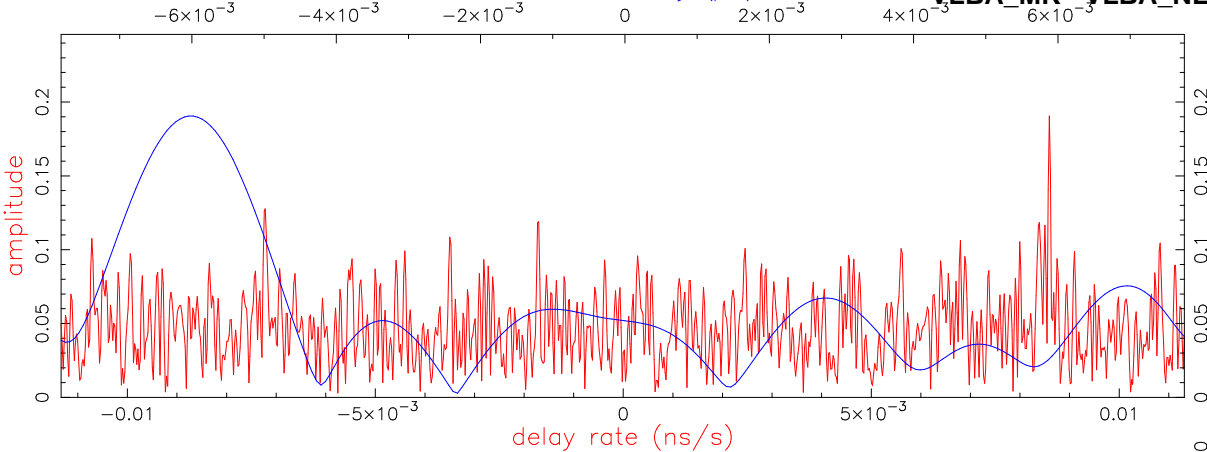
Group delay (usec)(sbd) -7.54871478956E+03 Apriori delay (usec) -7.54787263120E+03 Resid mbdelay (usec) 1.59164E-03 +/- 1.9E-04
 Sband delay (usec) -7.54870803245E+03 Apriori clock (usec) -2.4154453E+01 Resid sbdelay (usec) -8.35401E-01 +/- 1.5E-03
 Phase delay (usec) -7.54787263473E+03 Apriori clockrate (us/s) 1.5700001E-07 Resid phdelay (usec) -3.52901E-06 +/- 6.6E-07
 Delay rate (us/s) 1.26695932847E+00 Apriori rate (us/s) 1.26697017592E+00 Resid rate (us/s) -1.08475E-05 +/- 6.3E-09
 Total phase (deg) -271.9 Apriori accel (us/s/s) 4.37953635155E-05 Resid phase (deg) -109.4 +/- 20.4

RMS Theor. Amplitude 0.233 +/- 0.041 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 53.6 47.8 Search (1024X32) 0.152 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 65.9 83.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 37.0 28.9 Inc. seg. avg. 0.232 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 27.8 50.4 Inc. frq. avg. 0.238 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 103.5 el 18.3 pa -66.8 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -7273.703 -3236.878 simultaneous interpolator

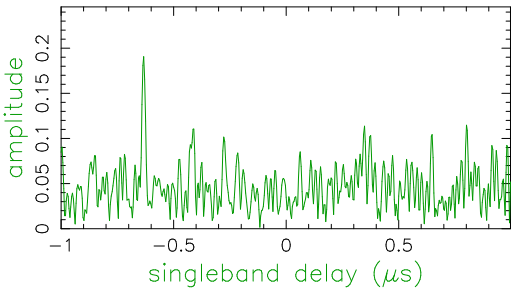
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/mn..1970YE Output file: /Exps/c201e/v1/1234/No0073/mn.W.119.1970YE

multiband delay (μs)

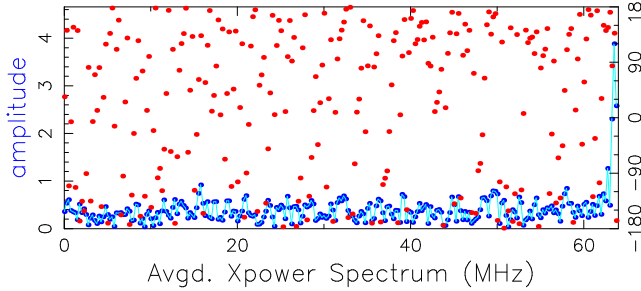


Fringe quality 0

SNR 7.0
Int time 176.358
Amp 0.246
Phase 109.5
PFD 5.2e-04
Delays (us)
SBD -0.633726
MBD -0.006007
Fringe rate (Hz)
0.741293
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

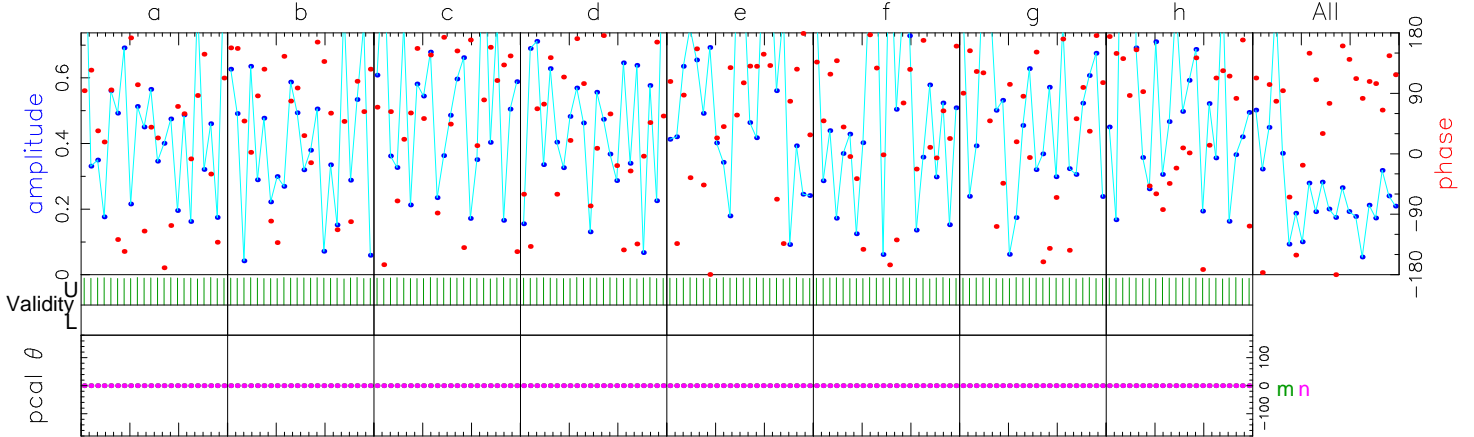


delay rate (ns/s)

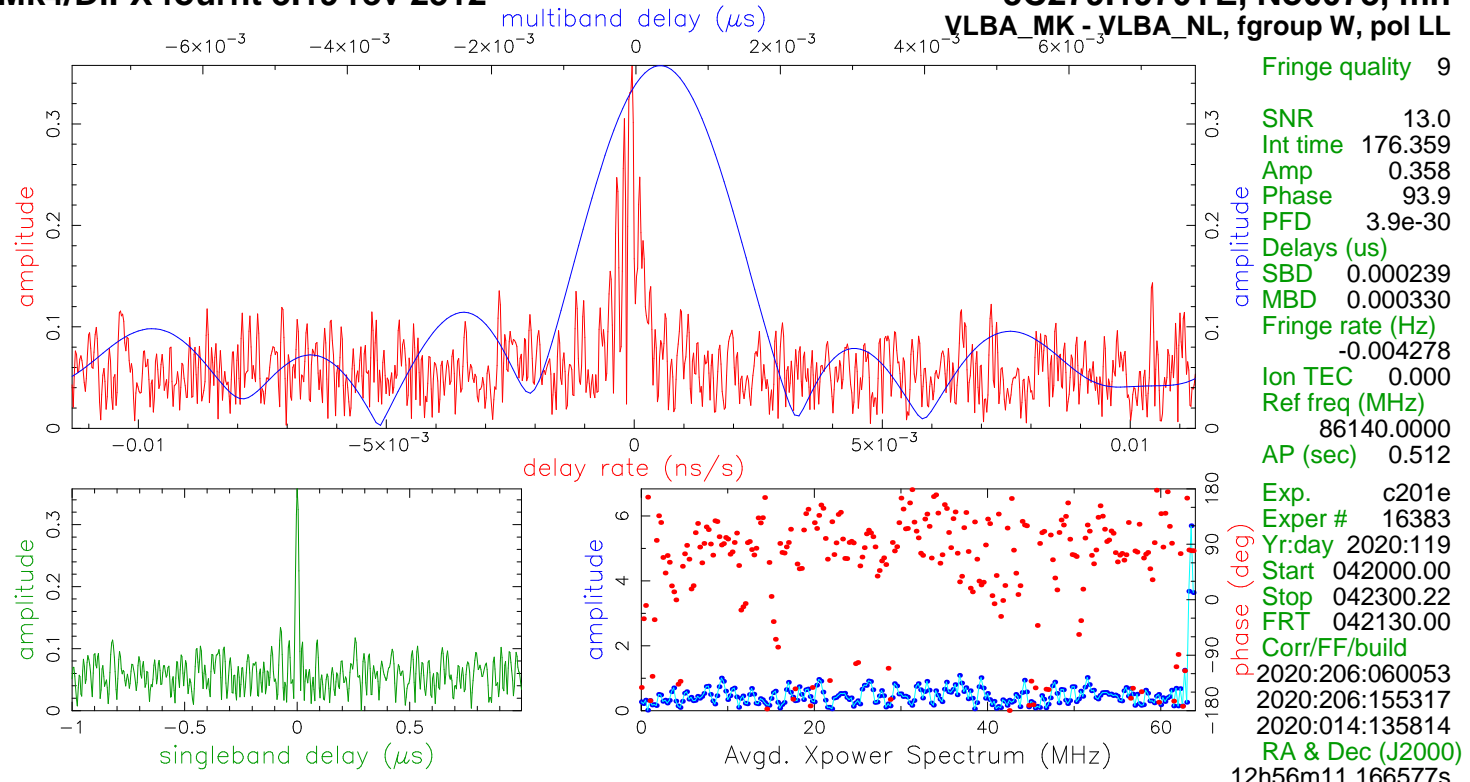


Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155325
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

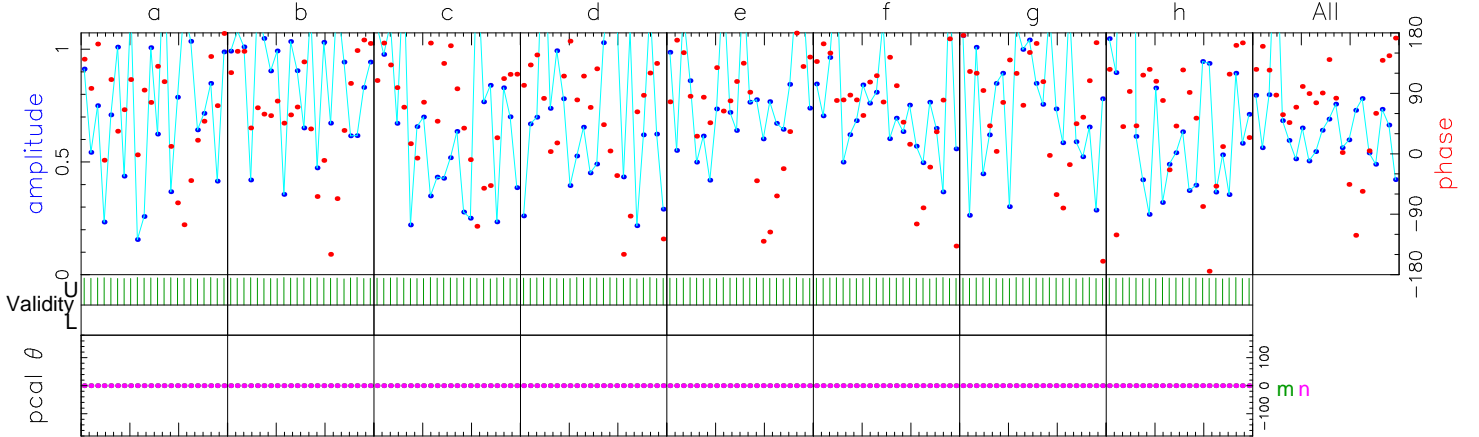
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-7.54850363788E+03									
Sband delay (usec)	-7.54850635695E+03									
Phase delay (usec)	-7.54787262767E+03									
Delay rate (us/s)	1.26697878160E+00									
Total phase (deg)			-53.0							
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): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude	0.246 +/- 0.035									
Search (1024X32)	0.184									
Interp.	0.000									
Inc. seg. avg.	0.278									
Inc. frq. avg.	0.234									
PCal period (AP's) 5, 5										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
m: az 103.5 el 18.3 pa -66.8										
n: az 174.2 el 42.2 pa -4.2										
u,v (fr/asec)	-7273.703	-3236.878								
Control file: cf_1234_gmva										
Input file: /Exps/c201e/v1/1234/No0073/mn..1970YE										
Output file: /Exps/c201e/v1/1234/No0073/mn.W.135.1970YE										



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



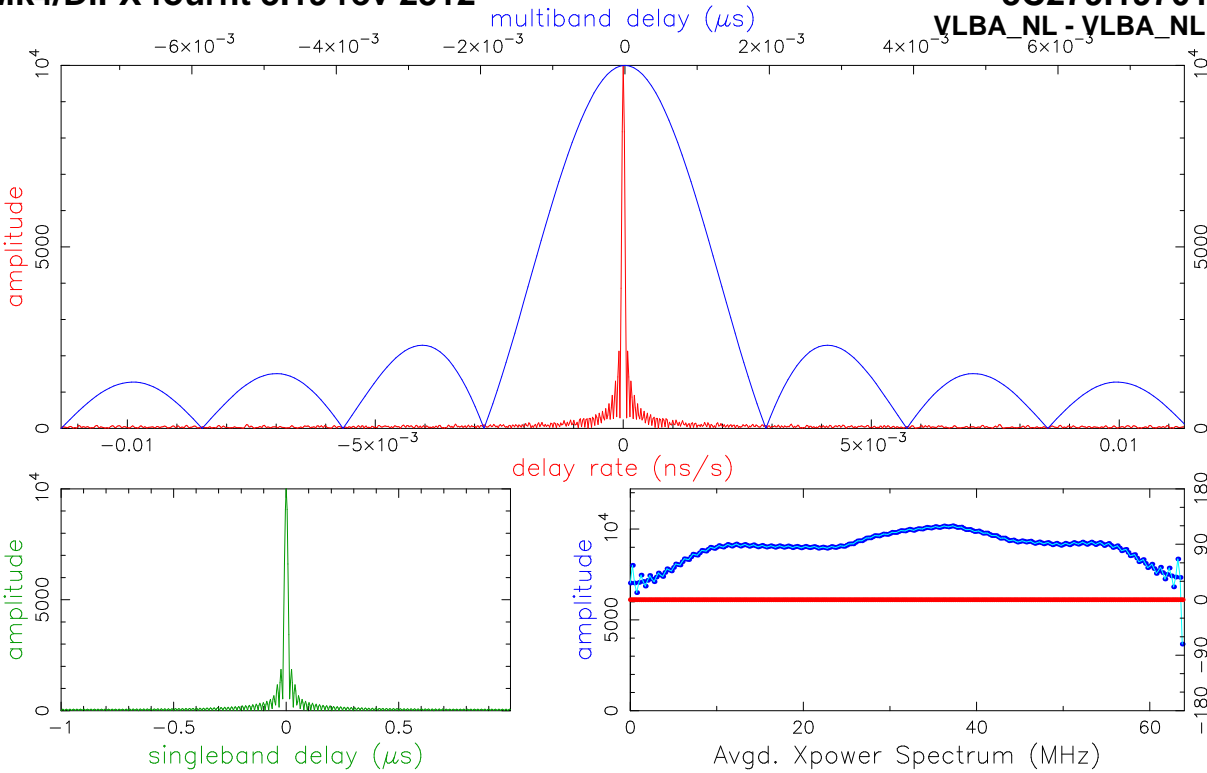
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	97.3	85.4	101.2	79.5	108.1	99.3	93.6	90.0	Phase	93.9
	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.6	Ampl.	0.4
	255.6	257.1	263.7	256.9	256.8	258.2	258.0	256.7	Sbd box	257.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-7.54787230164E+03	Apriori delay (usec)	-7.54787263120E+03	Resid mbdelay (usec)	3.29557E-04	+/-	8.4E-05
Sband delay (usec)	-7.54787239220E+03	Apriori clock (usec)	-2.4154453E+01	Resid sbdelay (usec)	2.39000E-04	+/-	6.6E-04
Phase delay (usec)	-7.54787262817E+03	Apriori clockrate (us/s)	1.5700001E-07	Resid phdelay (usec)	3.02924E-06	+/-	2.8E-07
Delay rate (us/s)	1.26697012625E+00	Apriori rate (us/s)	1.26697017592E+00	Resid rate (us/s)	-4.96685E-08	+/-	2.7E-09
Total phase (deg)	-68.6	Apriori accel (us/s/s)	4.37953635155E-05	Resid phase (deg)	93.9	+/-	8.8

ph/seg (deg)	68.8	RMS	20.7	Theor.	Amplitude	0.358 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	110.1	68.8	20.7	Search (1024X32)	0.351	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	9.9	36.1	20.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	26.6	12.5	20.7	Inc. seg. avg.	0.636	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
		21.8	20.7	Inc. frq. avg.	0.353	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	

m: az 103.5 el 18.3 pa -66.8 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) -7273.703 -3236.878 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/mn..1970YE Output file: /Exps/c201e/v1/1234/No0073/mn.W.89.1970YE

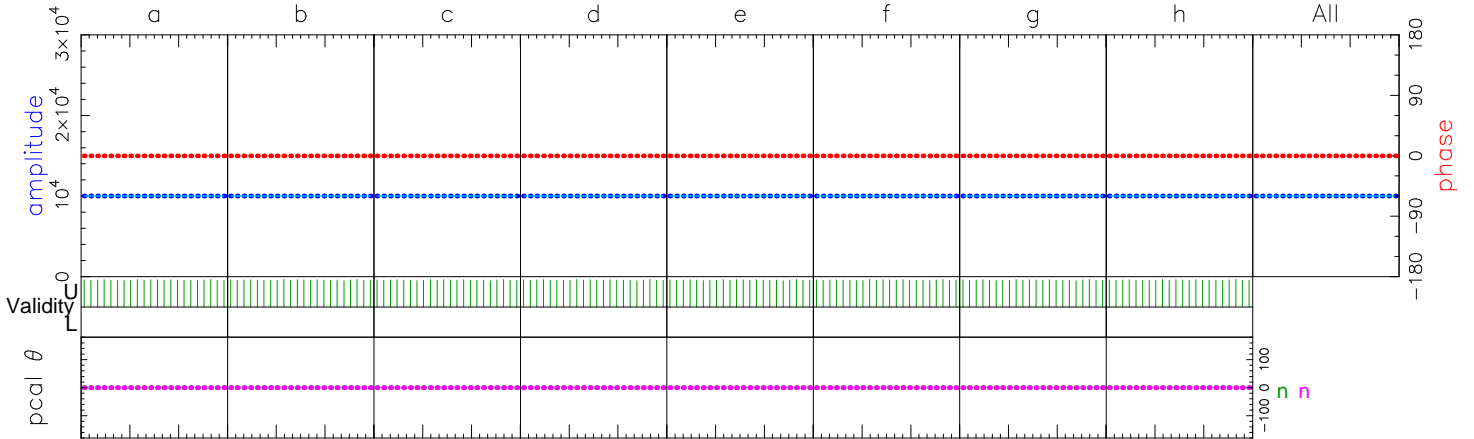


Fringe quality 9

SNR 363265.4
Int time 176.463
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. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155320
2020:014:135814
RA & Dec (J2000) 12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

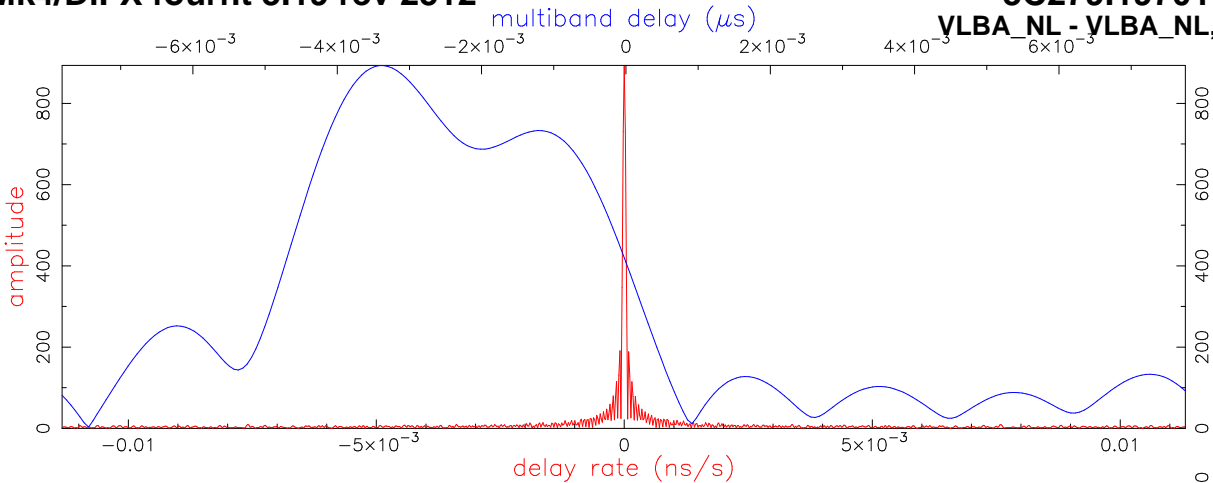


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	Ampl.	10000.0
n	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08
 Phase delay (usec) -1.93441256161E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.93441E-19 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.8E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

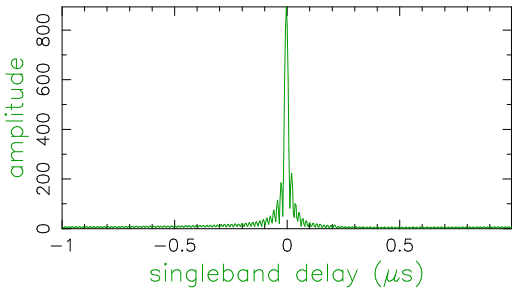
RMS Theor. Amplitude 10000.001 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 174.2 el 42.2 pa -4.2 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/nn..1970YE Output file: /Exps/c201e/v1/1234/No0073/nn.W.104.1970YE

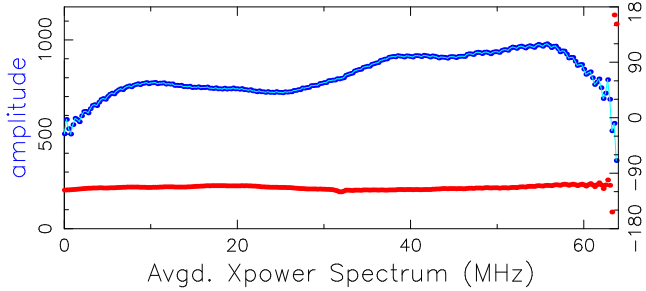


Fringe quality 5

SNR 32463.8
Int time 176.463
Amp 893.666
Phase -117.0
PFD 0.0e+00
Delays (us)
SBD -0.003671
MBD -0.003379
Fringe rate (Hz)
-0.000006
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

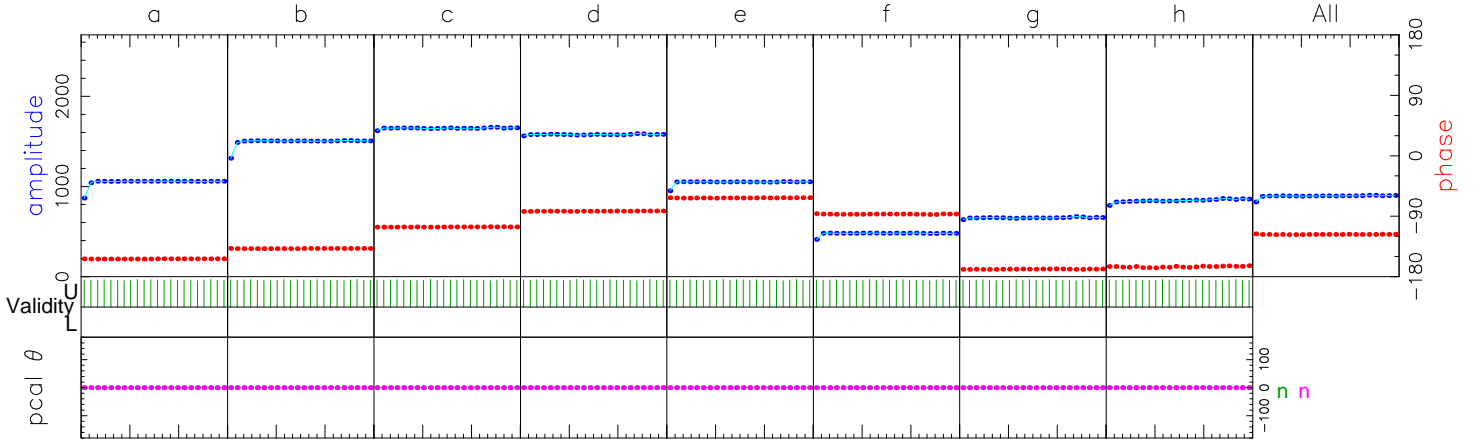


delay rate (ns/s)



Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155324
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

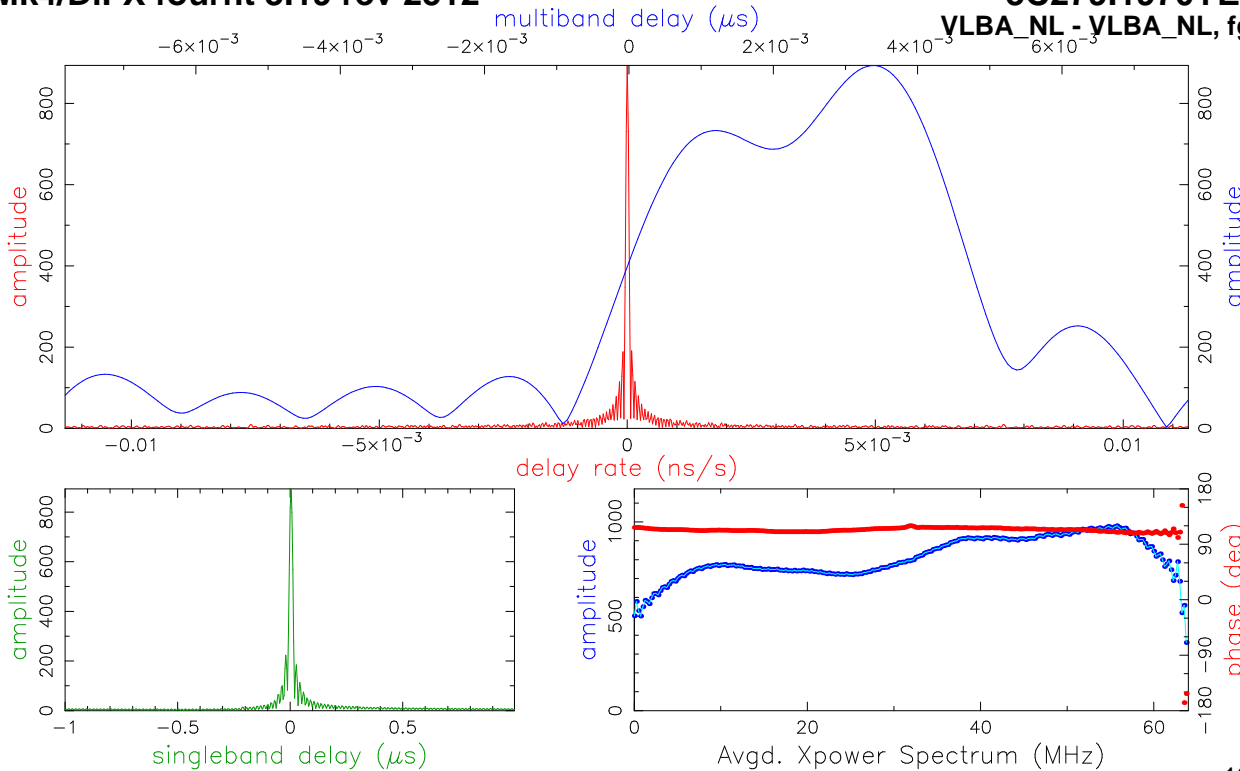


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-153.5	-138.0	-105.9	-82.4	-62.7	-86.8	-168.7	-165.1	Phase	-117.0
	1049.0	1496.0	1646.2	1575.2	1047.0	479.3	653.7	844.3	Ampl.	1098.8
	256.8	256.4	256.3	256.3	256.5	255.1	256.1	256.0	Sbd box	256.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:n	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	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.37887500000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-3.37888E-03	+/- 3.3E-08
Sband delay (usec)	-3.67075000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.67075E-03	+/- 2.7E-07
Phase delay (usec)	-3.77305112053E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.77305E-06	+/- 1.1E-10
Delay rate (us/s)	-6.80215314801E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-6.80215E-11	+/- 1.1E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-117.0	+/- 0.0

	RMS	Theor.	Amplitude	893.666 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	0.2	0.0	Search (1024X32)	893.079	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	1.6	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	44.6	0.0	Inc. seg. avg.	893.359	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	51.2	0.0	Inc. frq. avg.	1098.846	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			
n: az 174.2 el 42.2 pa -4.2	n: az 174.2 el 42.2 pa -4.2		u,v (fr/asec) 0.000 0.000		simultaneous interpolator				

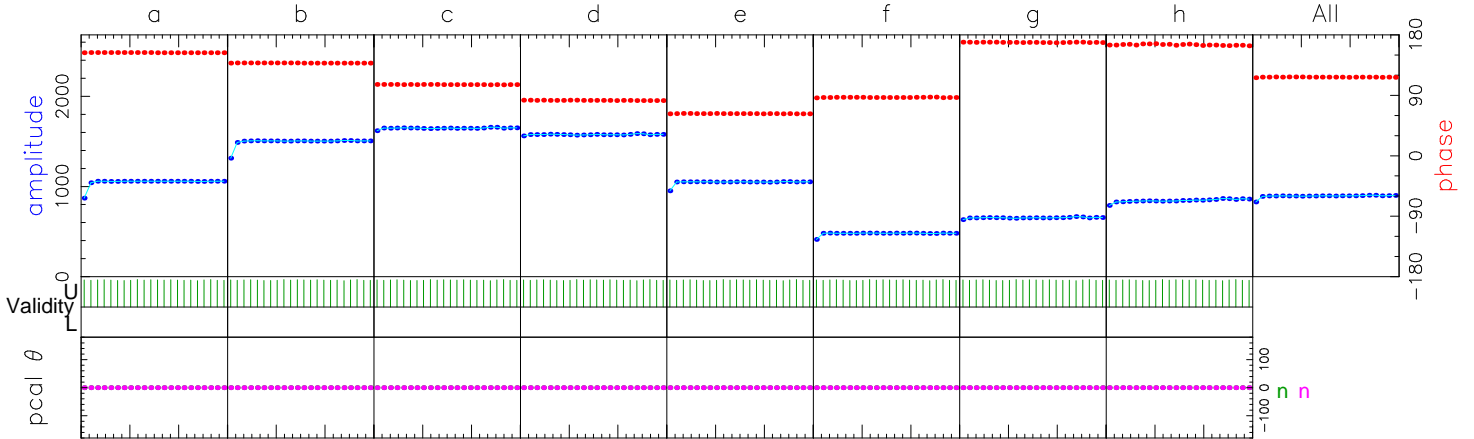
Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, nn
VLBA_NL - VLBA_NL, fgroup W, pol RL



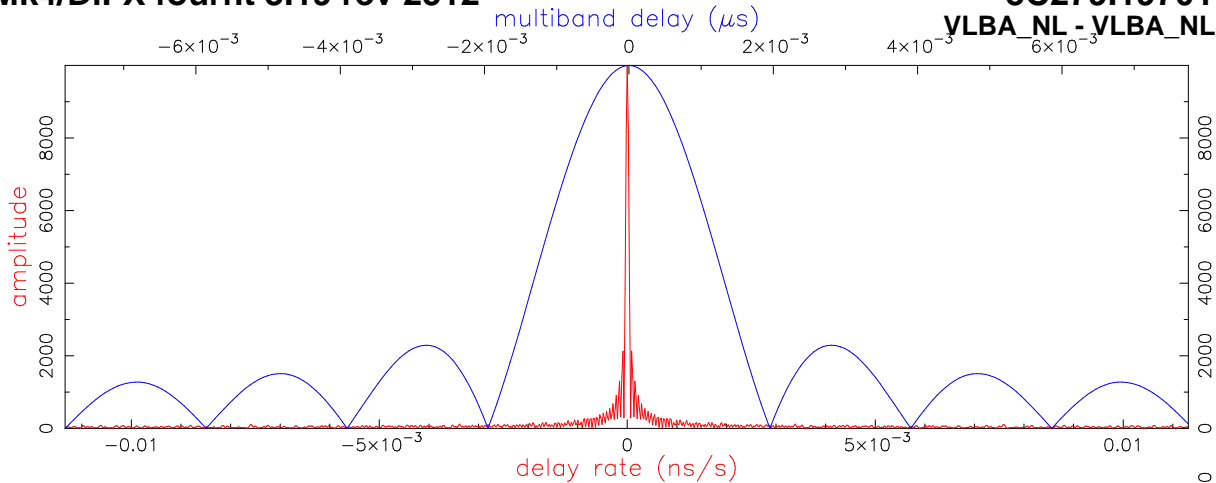
Fringe quality 5
 SNR 32463.9
 Int time 176.463
 Amp 893.669
 Phase 117.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.003671
 MBD 0.003379
 Fringe rate (Hz) 0.000006
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 042000.00
 Stop 042300.22
 FRT 042130.00
 Corr/FF/build
 2020:206:06053
 2020:206:155326
 2020:014:135814
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



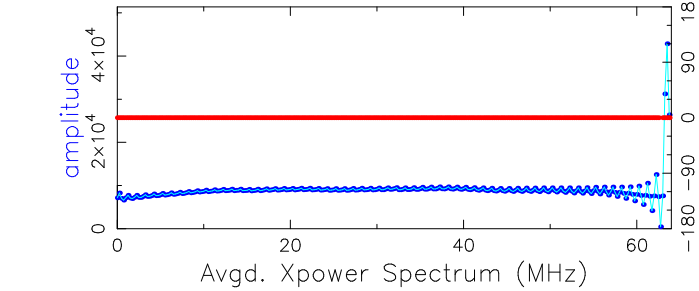
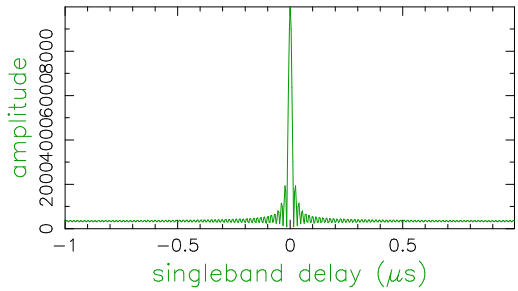
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	3.37887500000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.37888E-03	+/- 3.3E-08
Sband delay (usec)	3.67075000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		3.67075E-03	+/- 2.7E-07
Phase delay (usec)	3.77305112149E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.77305E-06	+/- 1.1E-10
Delay rate (us/s)	6.80215314801E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		6.80215E-11	+/- 1.1E-12
Total phase (deg)	117.0		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		117.0	+/- 0.0

ph/seg (deg) 0.2 0.0 Search (1024X32) 893.082 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.6 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) 44.6 0.0 Inc. seg. avg. 893.361 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.2 0.0 Inc. frq. avg. 1098.849 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 174.2 el 42.2 pa -4.2 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/nn..1970YE Output file: /Exps/c201e/v1/1234/No0073/nn.W.140.1970YE



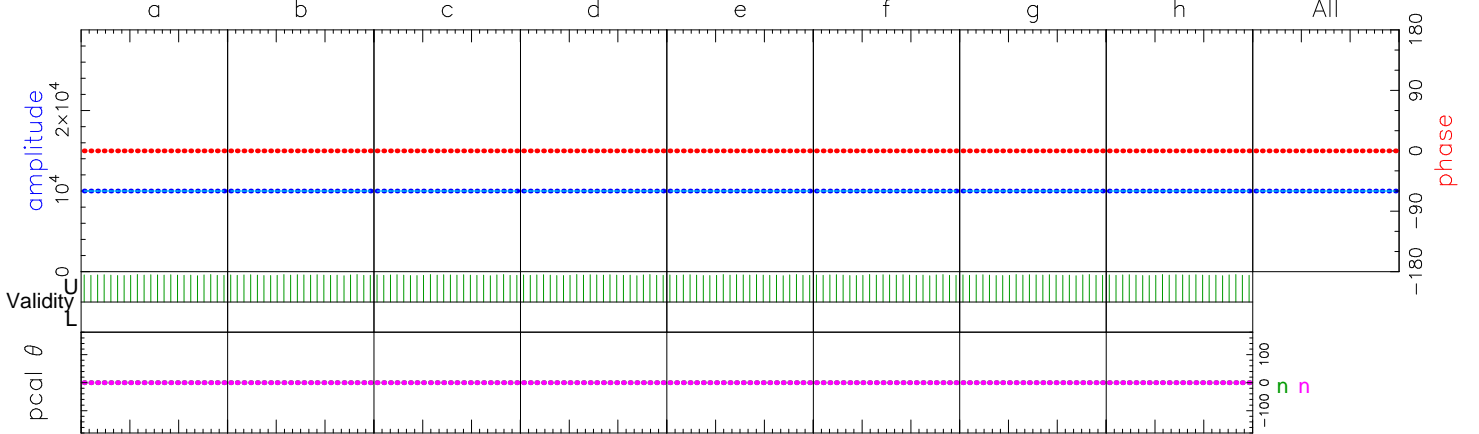
Fringe quality 9

SNR 363265.9
Int time 176.463
Amp 9999.998
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201e
Yr:day 16383
Start 2020:119
Stop 2020:119
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155317
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	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	Ampl.	10000.0
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

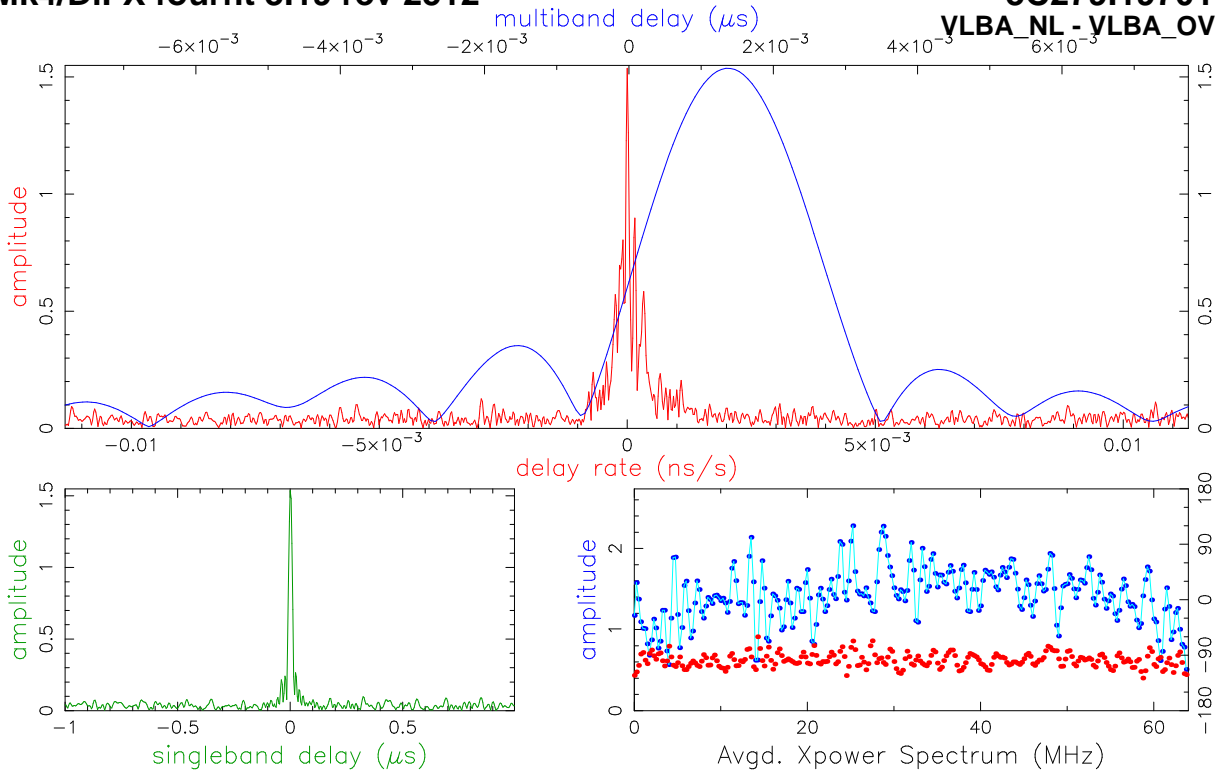
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08
 Phase delay (usec) 1.30510772015E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.30511E-19 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.8E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.998 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.998 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 174.2 el 42.2 pa -4.2 n: az 174.2 el 42.2 pa -4.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/nn..1970YE Output file: /Exps/c201e/v1/1234/No0073/nn.W.88.1970YE

Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, no
VLBA_NL - VLBA_OV, fgroup W, pol LL

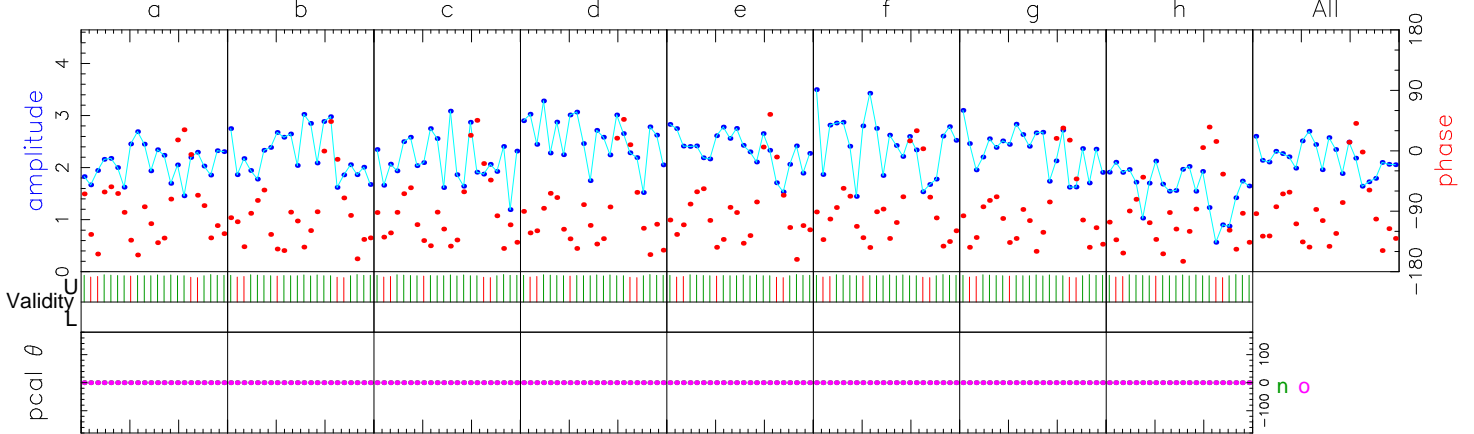


Fringe quality 5

SNR 55.6
Int time 172.278
Amp 1.549
Phase -100.5
PFD 0.0e+00
Delays (us)
SBD 0.001169
MBD 0.001402
Fringe rate (Hz) 0.000851
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155319
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



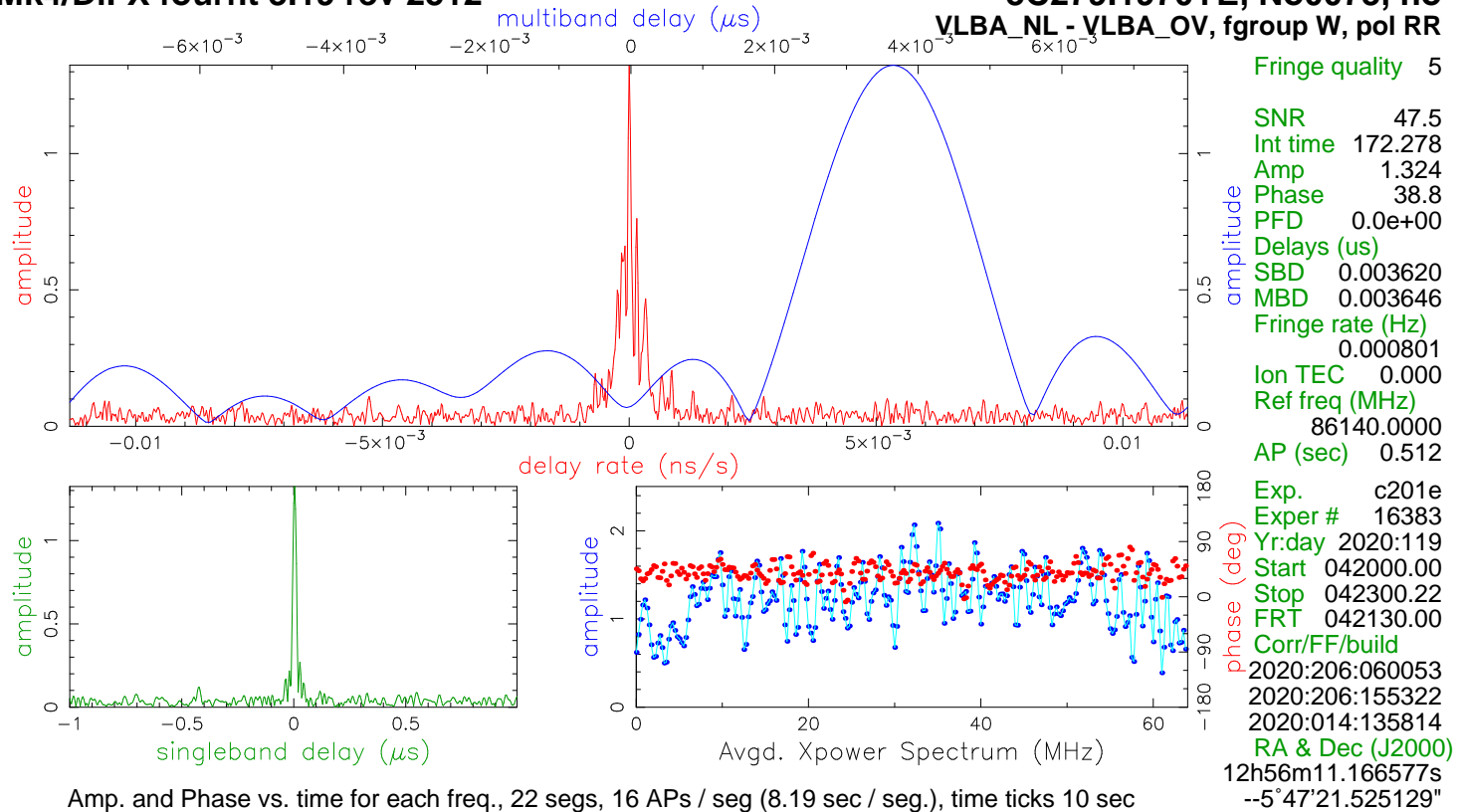
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.12757429922E+03	Apriori delay (usec)	1.12757289719E+03	Resid mbdelay (usec)	1.40203E-03	+/-	2.0E-05
Sband delay (usec)	1.12757406569E+03	Apriori clock (usec)	1.2221436E+01	Resid sbdelay (usec)	1.16850E-03	+/-	1.5E-04
Phase delay (usec)	1.12757289394E+03	Apriori clockrate (us/s)	1.3299997E-07	Resid phdelay (usec)	-3.24170E-06	+/-	6.6E-08
Delay rate (us/s)	-5.47978465427E-01	Apriori rate (us/s)	-5.47978475303E-01	Resid rate (us/s)	9.87588E-09	+/-	6.4E-10
Total phase (deg)		Apriori accel (us/s/s)	-6.63867701334E-06	Resid phase (deg)	-100.5	+/-	2.1

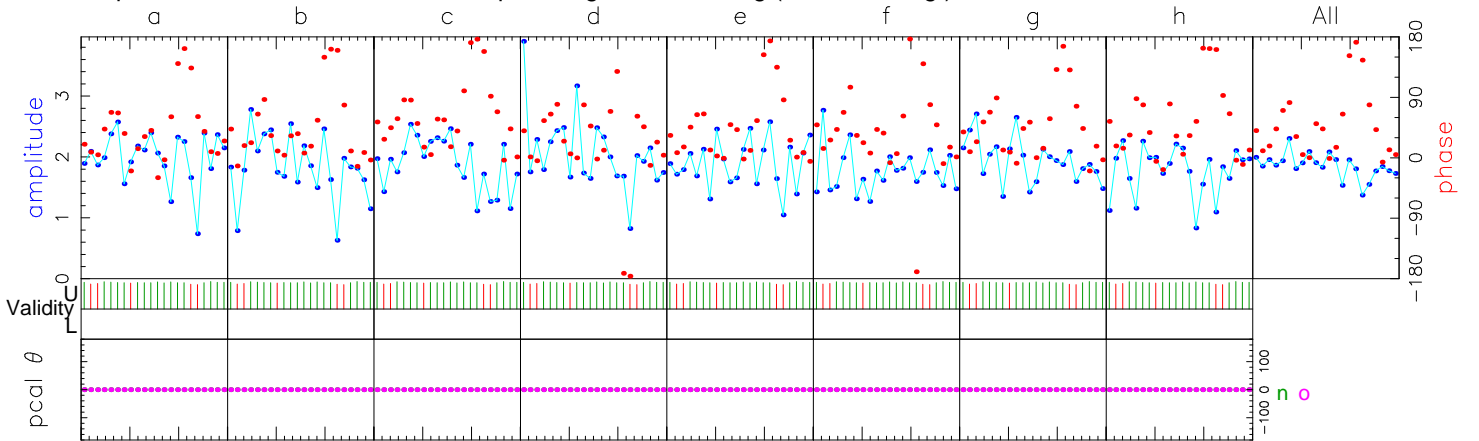
ph/seg (deg)	51.3	RMS	4.8	Theor.	4.8	Amplitude	1.549 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	45.3	Search (1024X32)	1.467	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	4.9	Inc. seg. avg.	2.183	Inc. frq. avg.	1.538	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	12.6	Inc. frq. avg.	1.538	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite
n: az 174.2 el 42.2 pa -4.2		o: az 139.4 el 38.1 pa -31.2		u,v (fr/asec)	3151.896 592.419			ion window (TEC)	0.00	0.00	

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/no..1970YE Output file: /Exps/c201e/v1/1234/No0073/no.W.101.1970YE

simultaneous interpolator



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

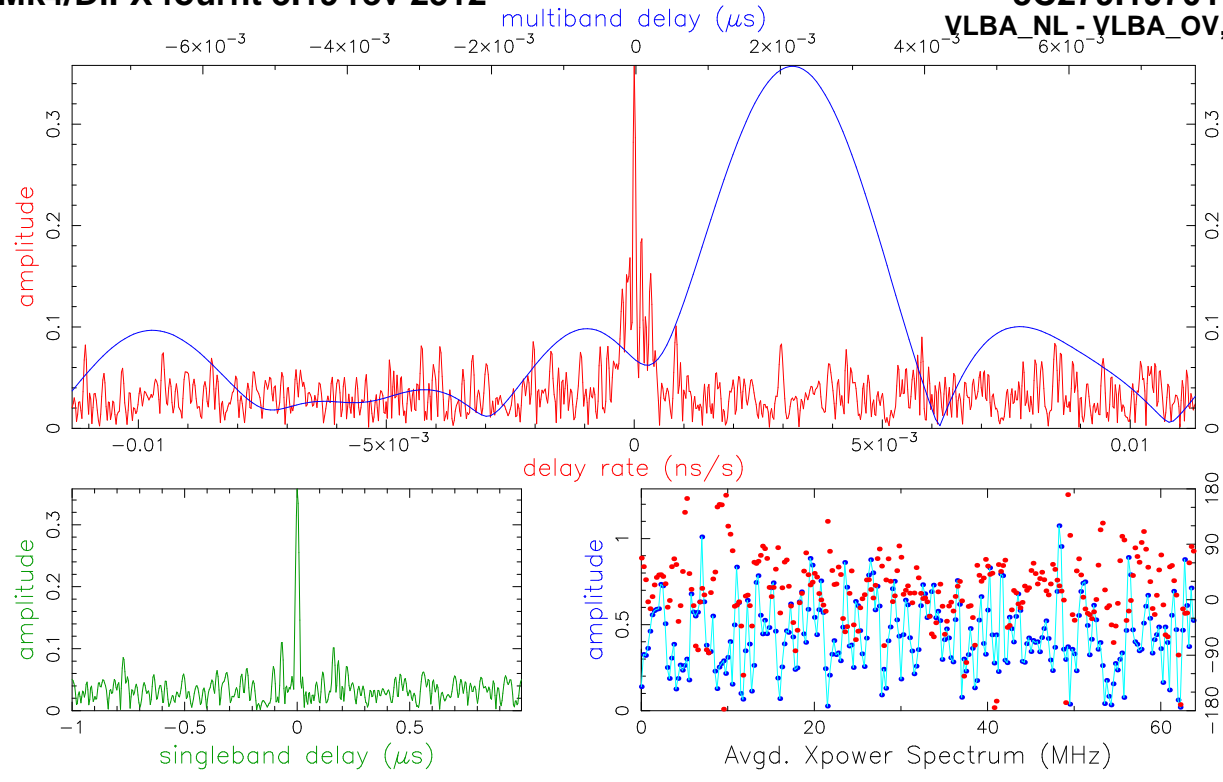


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		1.12757654350E+03		Apriori delay (usec)		1.12757289719E+03		Resid mbdelay (usec)	3.64631E-03	+/- 2.3E-05
Sband delay (usec)		1.12757651694E+03		Apriori clock (usec)		1.2221436E+01		Resid sbdelay (usec)	3.61975E-03	+/- 1.8E-04
Phase delay (usec)		1.12757289844E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)	1.25148E-06	+/- 7.8E-08
Delay rate (us/s)		-5.47978466009E-01		Apriori rate (us/s)		-5.47978475303E-01		Resid rate (us/s)	9.29344E-09	+/- 7.5E-10
Total phase (deg)			169.7	Apriori accel (us/s/s)		-6.63867701334E-06		Resid phase (deg)	38.8	+/- 2.4

ph/seg (deg) 50.7 5.7 Search (1024X32) 1.246 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.8 9.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.3 3.4 Inc. seg. avg. 1.849 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.4 6.0 Inc. frq. avg. 1.330 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 174.2 el 42.2 pa -4.2 o: az 139.4 el 38.1 pa -31.2 u,v (fr/asec) 3151.896 592.419 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/no..1970YE Output file: /Exps/c201e/v1/1234/No0073/no.W.118.1970YE

Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, no VLBA_NL - VLBA_OV, fgroup W, pol LR

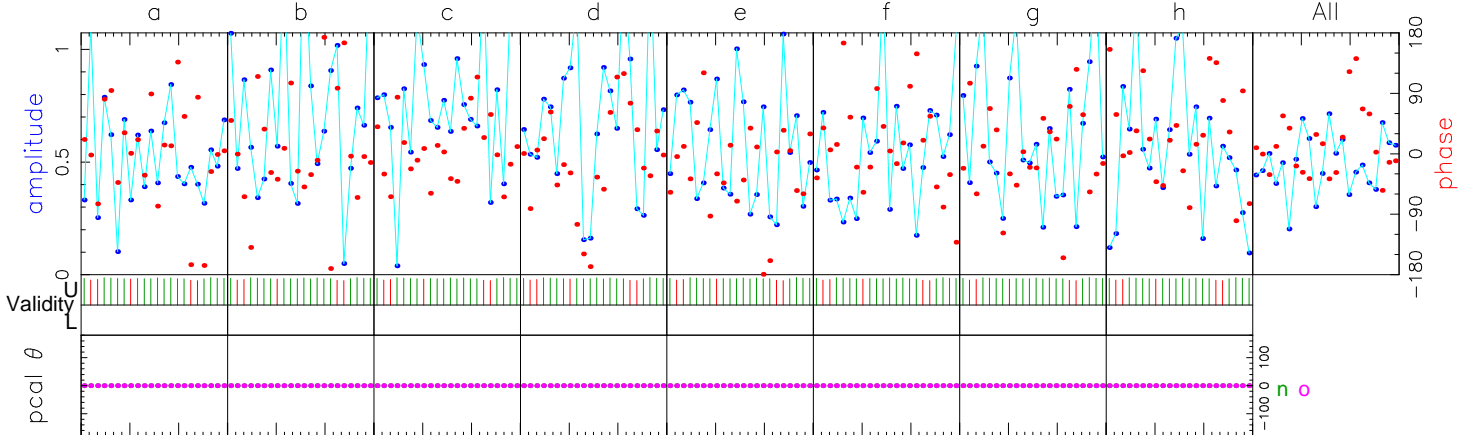


Fringe quality 9

SNR 12.8
 Int time 172.279
 Amp 0.358
 Phase -0.4
 PFD 2.4e-29
 Delays (us)
 SBD 0.000614
 MBD 0.002180
 Fringe rate (Hz) 0.000761
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 042000.00
 Stop 042300.22
 FRT 042130.00
 Corr/FF/build
 2020:206:060053
 2020:206:155324
 2020:014:135814
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	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	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	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	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

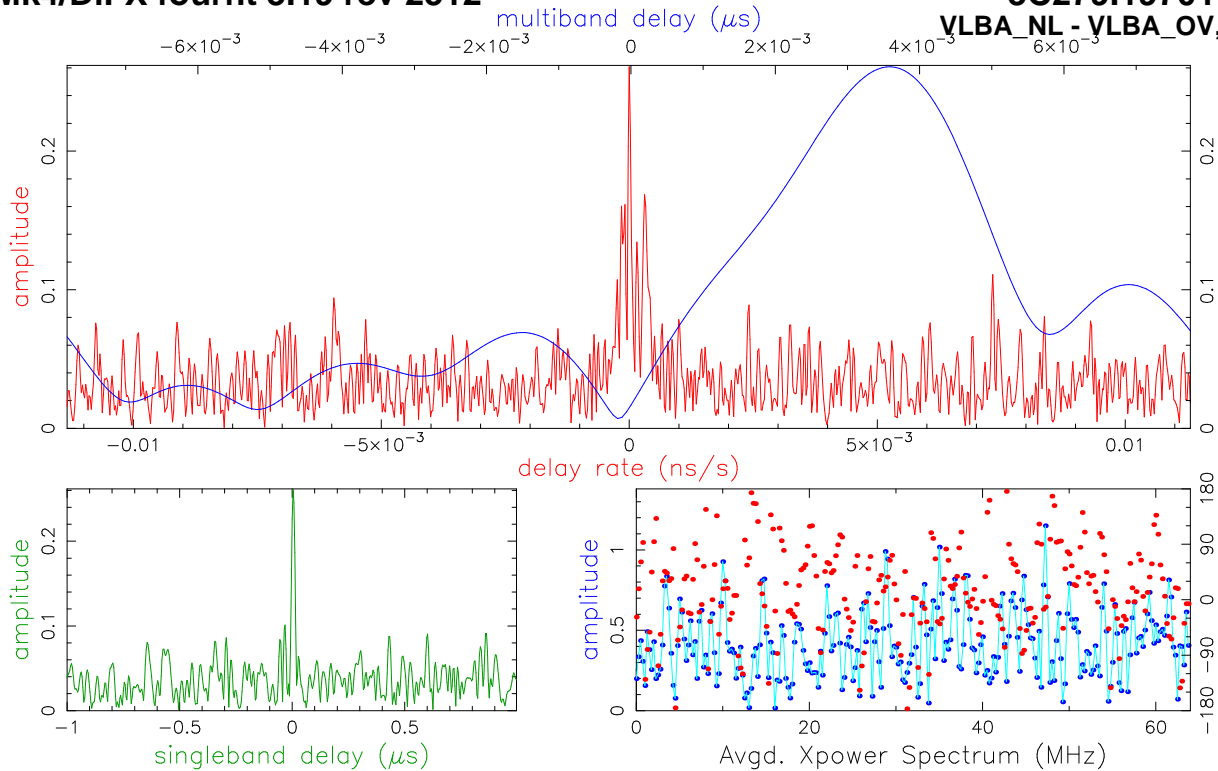
Group delay (usec)(sbd) 1.12757507769E+03 Apriori delay (usec) 1.12757289719E+03 Resid mbdelay (usec) 2.18050E-03 +/- 8.4E-05
 Sband delay (usec) 1.12757351144E+03 Apriori clock (usec) 1.2221436E+01 Resid sbdelay (usec) 6.14250E-04 +/- 6.7E-04
 Phase delay (usec) 1.12757289717E+03 Apriori clockrate (us/s) 1.3299997E-07 Resid phdelay (usec) -1.31390E-08 +/- 2.9E-07
 Delay rate (us/s) -5.47978466470E-01 Apriori rate (us/s) -5.47978475303E-01 Resid rate (us/s) 8.83288E-09 +/- 2.8E-09
 Total phase (deg) 130.5 Apriori accel (us/s/s) -6.63867701334E-06 Resid phase (deg) -0.4 +/- 8.9

RMS Theor. Amplitude 0.358 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 51.5 20.9 Search (1024X32) 0.340 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 52.0 36.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 17.0 12.6 Inc. seg. avg. 0.465 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 27.6 22.0 Inc. frq. avg. 0.359 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 174.2 el 42.2 pa -4.2 o: az 139.4 el 38.1 pa -31.2 u,v (fr/asec) 3151.896 592.419 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/no..1970YE Output file: /Exps/c201e/v1/1234/No0073/no.W.130.1970YE

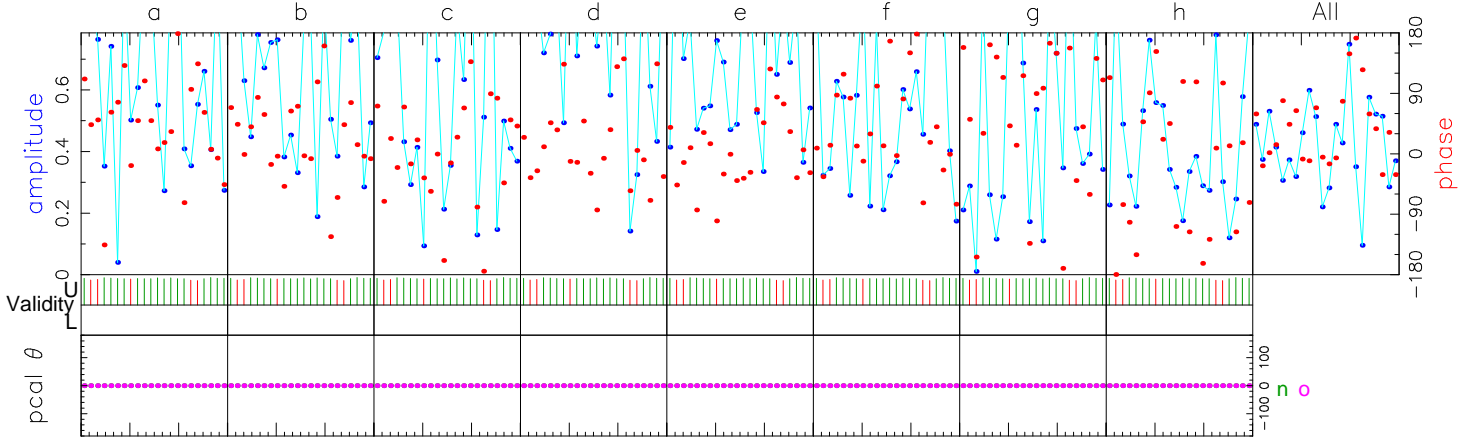
Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, no VLBA_NL - VLBA_OV, fgroup W, pol RL



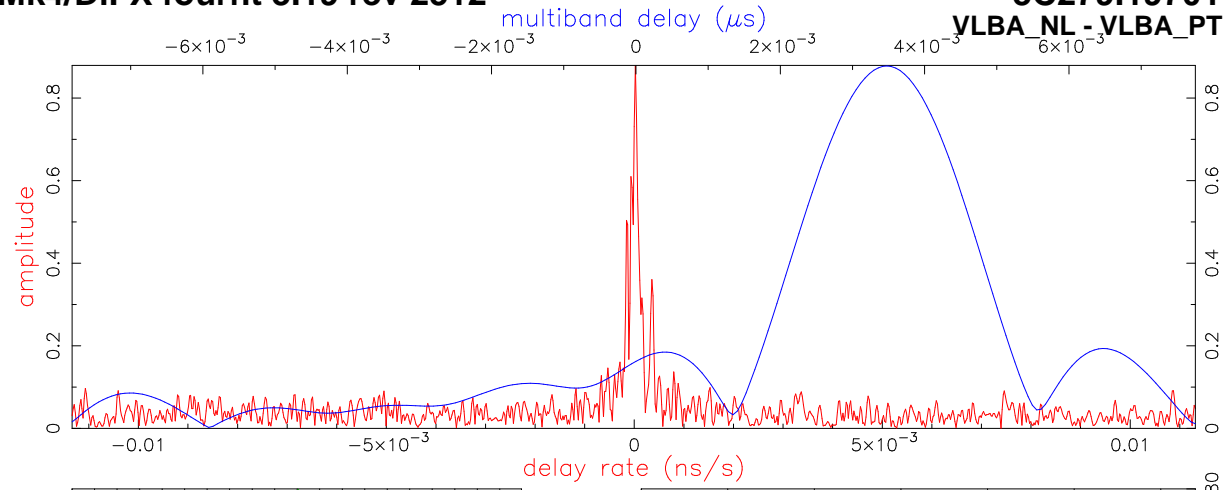
Fringe quality 9
 SNR 9.4
 Int time 172.278
 Amp 0.262
 Phase 29.7
 PFD 1.1e-12
 Delays (us)
 SBD 0.004686
 MBD 0.003605
 Fringe rate (Hz) 0.000835
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 042000.00
 Stop 042300.22
 FRT 042130.00
 Corr/FF/build
 2020:206:060053
 2020:206:155325
 2020:014:135814
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

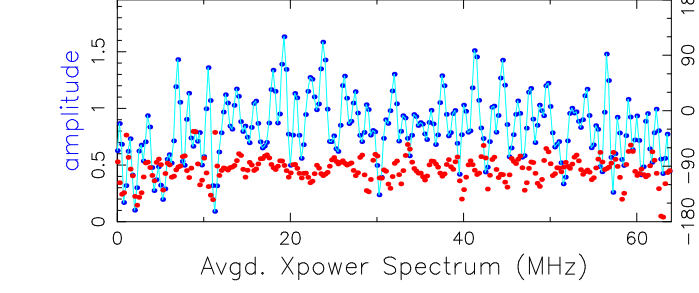
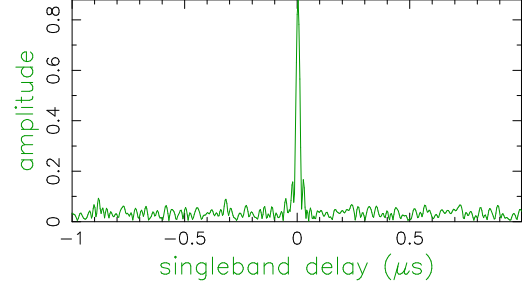


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.12757650178E+03				1.12757289719E+03			3.60459E-03	+/- 1.2E-04
Sband delay (usec)		1.12757758294E+03				1.2221436E+01			4.68575E-03	+/- 9.2E-04
Phase delay (usec)		1.12757289815E+03				1.3299997E-07			9.58707E-07	+/- 3.9E-07
Delay rate (us/s)		-5.47978465604E-01				-5.47978475303E-01			9.69874E-09	+/- 3.8E-09
Total phase (deg)			160.6			-6.63867701334E-06			29.7	+/- 12.2
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
pcal θ										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
n: az 174.2 el 42.2 pa -4.2										
o: az 139.4 el 38.1 pa -31.2										
u,v (fr/asec) 3151.896 592.419										
Control file: cf_1234_gmva										
Input file: /Exps/c201e/v1/1234/No0073/no..1970YE										
Output file: /Exps/c201e/v1/1234/No0073/no.W.139.1970YE										

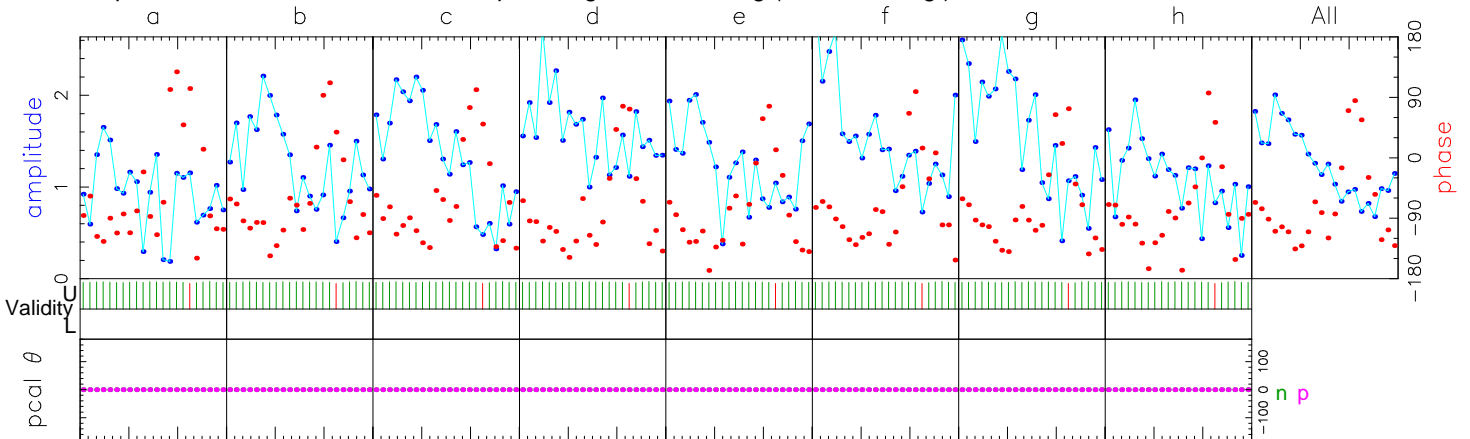
simultaneous interpolator



Fringe quality 6
SNR 31.9
Int time 175.738
Amp 0.879
Phase -95.6
PFD 0.0e+00
Delays (us)
SBD 0.003391
MBD 0.003463
Fringe rate (Hz) 0.002709
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155320
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

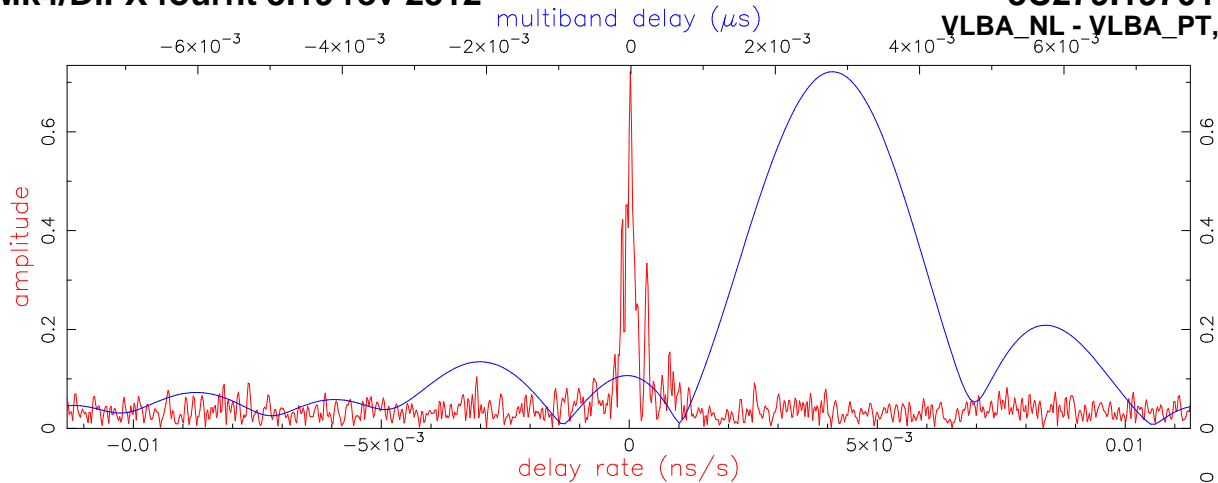


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-8.41394268498E+02				-8.41397731236E+02				3.46274E-03	+/- 3.4E-05
Sband delay (usec)	-8.41394339986E+02				1.5029547E+01				3.39125E-03	+/- 2.7E-04
Phase delay (usec)	-8.41397734319E+02				1.2999999E-07				-3.08347E-06	+/- 1.2E-07
Delay rate (us/s)	-3.67549473261E-01				-3.67549504710E-01				3.14486E-08	+/- 1.1E-09
Total phase (deg)			-300.3		3.36638717356E-06				-95.6	+/- 3.6
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): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 68.4 8.4 Search (1024X32) 0.849 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 60.4 14.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 5.5 5.1 Inc. seg. avg. 1.241 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 21.2 8.9 Inc. frq. avg. 0.877 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
n: az 174.2 el 42.2 pa -4.2 p: az 149.8 el 45.2 pa -24.4 u,v (fr/asec) 2118.348 875.796 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/np..1970YE Output file: /Exps/c201e/v1/1234/No0073/np.W.103.1970YE

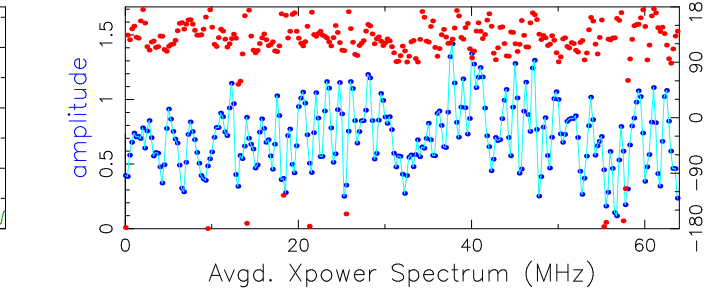
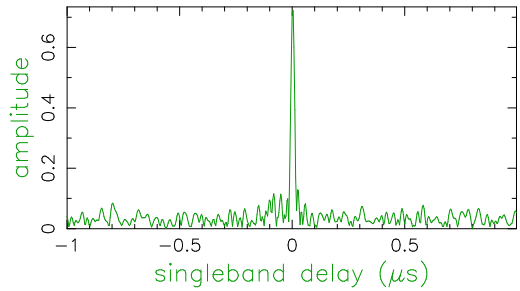
Mk4/DiFX fourfit 3.19 rev 2512

3C279.1970YE, No0073, np
VLBA_NL - VLBA_PT, fgroup W, pol RR



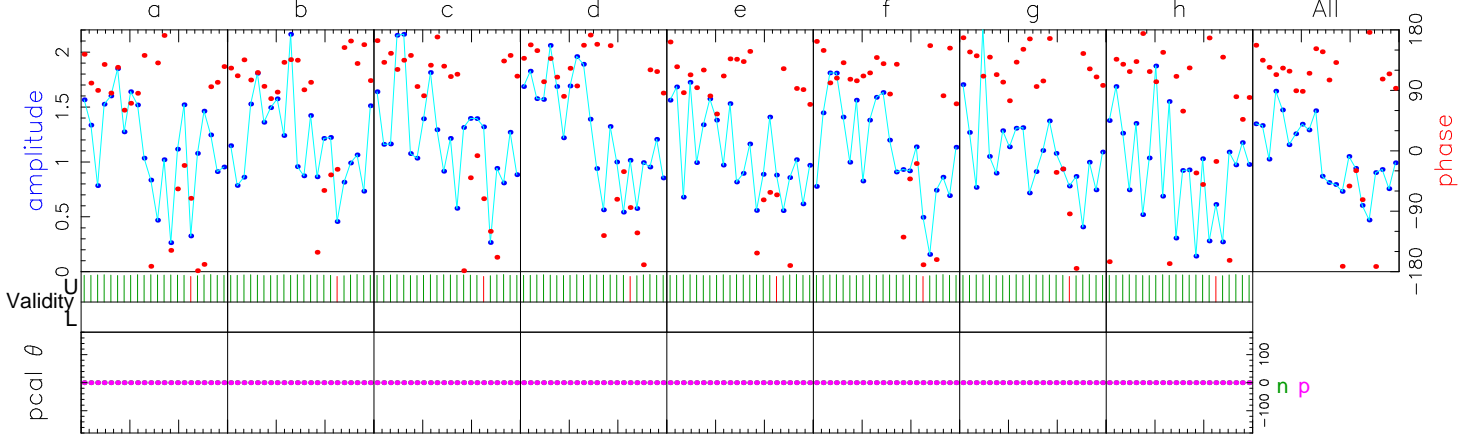
Fringe quality 7

SNR 26.6
Int time 175.737
Amp 0.734
Phase 125.2
PFD 0.0e+00
Delays (us)
SBD 0.002204
MBD 0.002759
Fringe rate (Hz)
0.002565
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155321
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

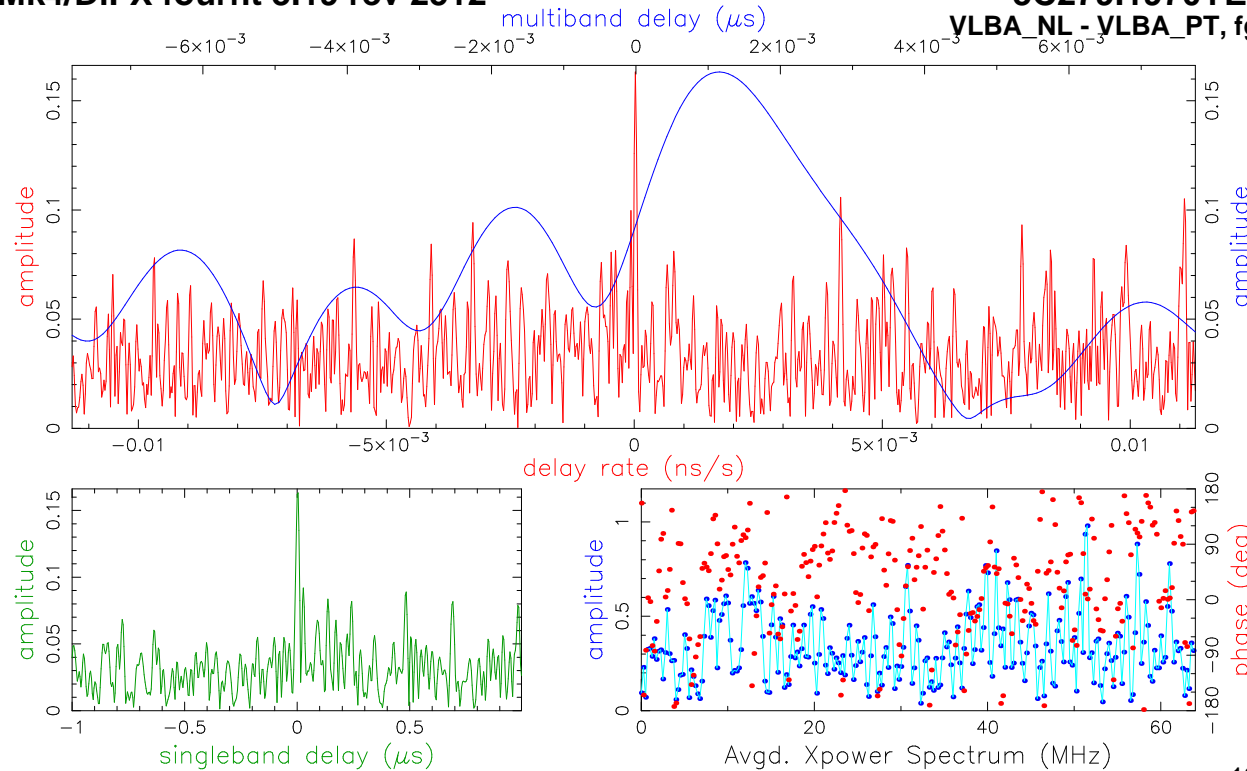


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-8.41394972498E+02	Apriori delay (usec)	-8.41397731236E+02	Resid mbdelay (usec)	2.75874E-03	+/-	4.1E-05
Sband delay (usec)	-8.41395527486E+02	Apriori clock (usec)	1.5029547E+01	Resid sbdelay (usec)	2.20375E-03	+/-	3.2E-04
Phase delay (usec)	-8.41397727198E+02	Apriori clockrate (us/s)	1.2999999E-07	Resid phdelay (usec)	4.03735E-06	+/-	1.4E-07
Delay rate (us/s)	-3.67549474928E-01	Apriori rate (us/s)	-3.67549504710E-01	Resid rate (us/s)	2.97821E-08	+/-	1.3E-09
Total phase (deg)	-79.5	Apriori accel (us/s/s)	3.36638717356E-06	Resid phase (deg)	125.2	+/-	4.3

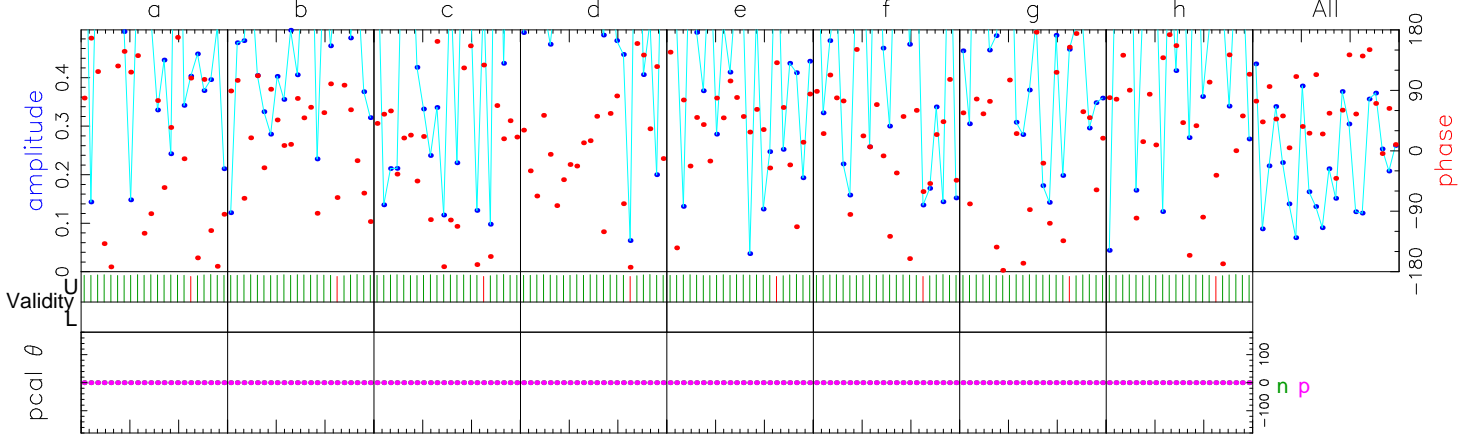
ph/seg (deg)	66.8	RMS	10.1	Theor.	10.1	Amplitude	0.734 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	59.9	Search (1024X32)	0.701	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	9.2	Inc. seg. avg.	1.040	Inc. frq. avg.	0.725	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	13.3	Inc. frq. avg.	0.725	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite
n: az 174.2 el 42.2 pa -4.2		p: az 149.8 el 45.2 pa -24.4		u,v (fr/asec)	2118.348 875.796	ion window (TEC)	0.00	0.00			simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/np..1970YE Output file: /Exps/c201e/v1/1234/No0073/np.W.115.1970YE



Fringe quality 0
SNR 6.0
Int time 175.738
Amp 0.166
Phase 61.3
PFD 2.0e-01
Delays (us)
SBD 0.002151
MBD 0.001158
Fringe rate (Hz)
0.002009
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 042000.00
Stop 042300.22
FRT 042130.00
Corr/FF/build
2020:206:060053
2020:206:155323
2020:014:135814
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	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		
p	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		
n:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.41396572811E+02									
Sband delay (usec)	-8.41395580236E+02									
Phase delay (usec)	-8.41397729260E+02									
Delay rate (us/s)	-3.67549481386E-01									
Total phase (deg)			-143.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									61.3	+/- 19.0
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 48.5 44.6 Search (1024X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 74.5 77.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 52.0 26.9 Inc. seg. avg. 0.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 38.3 46.9 Inc. frq. avg. 0.200 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
n: az 174.2 el 42.2 pa -4.2 p: az 149.8 el 45.2 pa -24.4 u,v (fr/asec) 2118.348 875.796 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0073/np..1970YE Output file: /Exps/c201e/v1/1234/No0073/np.W.127.1970YE

