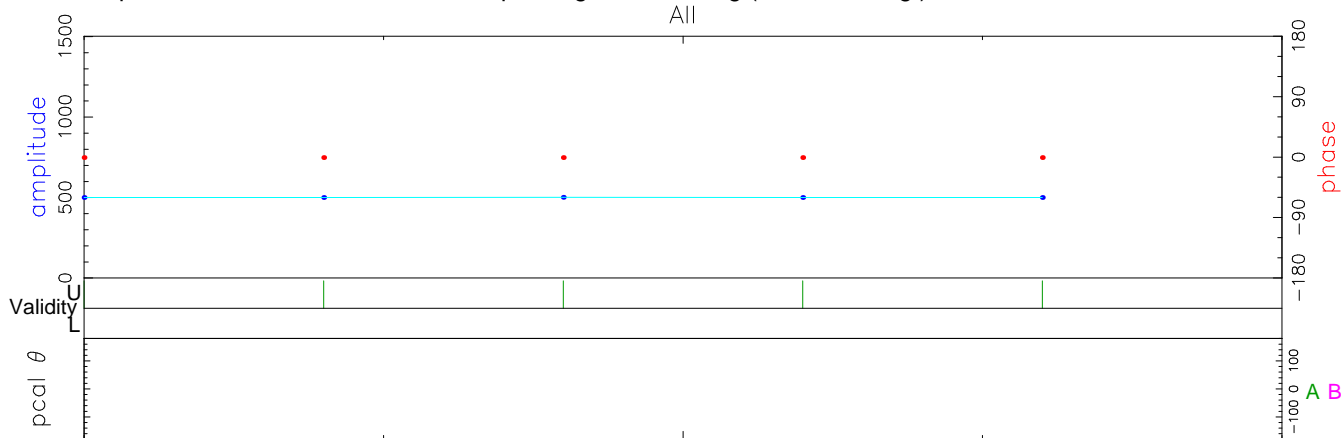Fringe quality 9
Error code H
SNR 685.0
Int time 4.000
Amp 501.041
Phase -0.6
PFD 0.0e+00
Delays (us)
SBD 0.000320
MBD 0.000000
Fringe rate (Hz)
-0.000013
Ion TEC 0.00
Ref freq (MHz)
100000.0000
AP (sec) 0.800

Exp. h4
Exper # 7000
Yr:day 2012:187
Start 180503.00
Stop 180507.00
FRT 180505.00
Corr/FF/build
2012:186:181155
2012:187:181155
2012:187:083214
RA & Dec (J2000)
03h00m 0.0000s
+81˚00' 0.000"

Amp. and Phase vs. time for each freq., 5 segs, 1 APs / seg (0.80 sec / seg.), time ticks 1 sec
All

100000.00		Freq (MHz)
-0.6		Phase
501.0		Ampl.
65.0		Sbd box
U/L 5/0		APs used
A 0		PC freqs
B 0		PC freqs
A:B -90:-90		PC phase
A:B 0:0		Manl PC
A 0		PC amp
B 0		
A W00U		Chan ids
B W00U		Chan ids

	RMS	Theor.	Amplitude					
Group delay (usec)			0.00000000000E+00	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/-	2.5E-05
Sband delay (usec)			3.20002354049E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.20002E-04 +/-	2.5E-05
Phase delay (usec)			-1.75450647903E-08	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.75451E-08 +/-	4.6E-09
Delay rate (us/s)			-1.26821148201E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.26821E-10 +/-	2.0E-09
Total phase (deg)			-0.6	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-0.6 +/-	0.2

	RMS	Theor.	Amplitude	501.041 +/- 0.731	Pcal mode: NORMAL, NORMAL	Pcal period (AP's) 9999, 9999	
ph/seg (deg)	0.0	0.2	Search (16X8)	500.962	Pcal rate: -5.000E-04, -5.000E-04 (us/s)	sb window (us)	-0.500 0.500
amp/seg (%)	0.0	0.3	Interp.	500.962	Bits/sample: 2	SampCntNorm: disabled	mb window (us)	-0.000 0.000
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	501.039	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.006 0.006
amp/frq (%)	0.0	0.0	Inc. frq. avg.	501.041	Data rate(Mb/s): 128	nlags: 64	t_cohere infinite	ion window (TEC)	-0.000 0.000

A: az 347.8 el 43.8 pa 94.6   B: az 347.8 el 43.8 pa 94.6   u,v (fr/asec) 0.000 0.000   iterative interpolator
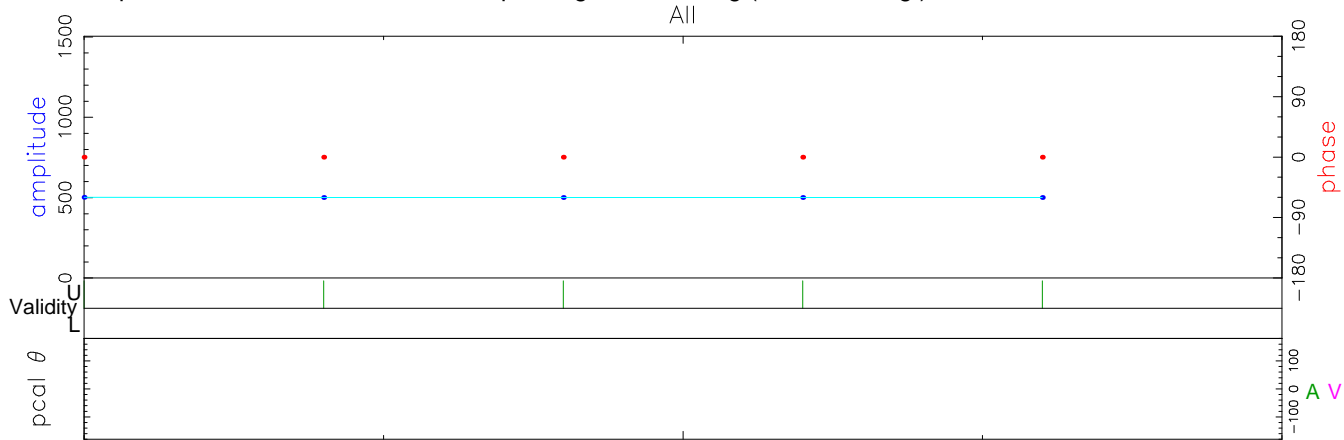
Control file: cf-7000   Input file: /data-sc01/gbc/alma/h4-7000/7000/187-1805/AB..wgnvoc   Output file: /data-sc01/gbc/alma/h4-7000/7000/187-1805/AB.W.1.wgnvoc

Mk4/DiFX fearfit 3.8 rev 747

Noise.wgnvoc, 187-1805, AV
At - Vt, fgroup W, pol RR

Plots:

- amplitude vs delay rate (ns/s), x-axis from -6×10^{-3} to 6×10^{-3}
- amplitude vs singleband delay (μs)
- Avgd. Xpower Spectrum (MHz), amplitude and phase (deg)

Right-hand parameter panel:
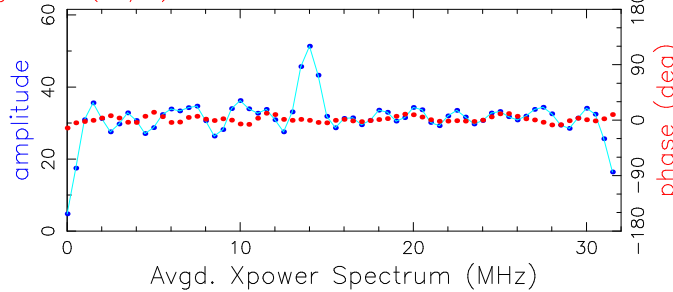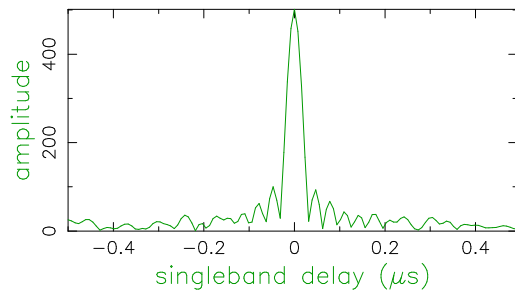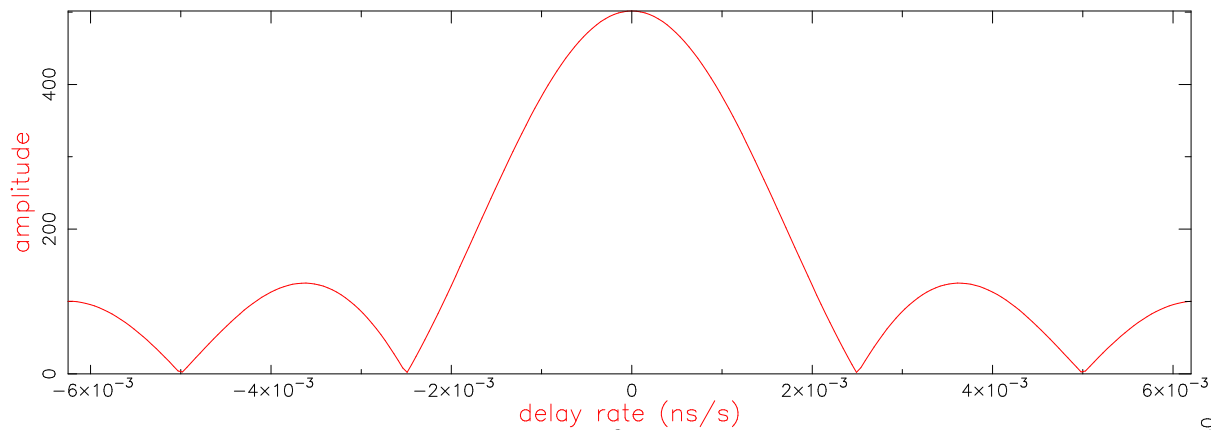
Fringe quality   9
Error code H
SNR   685.8
Int time   4.000
Amp   501.635
Phase   -0.2
PFD   0.0e+00
Delays (us)
SBD   -0.000272
MBD   0.000000
Fringe rate (Hz)
        0.000025
Ion TEC   0.00
Ref freq (MHz)
    100000.0000
AP (sec)   0.800

Exp.   h4
Exper #   7000
Yr:day 2012:187
Start   180503.00
Stop   180507.00
FRT   180505.00
Corr/FF/build
2012:186:181155
2012:187:181253
2012:187:083214
RA & Dec (J2000)
03h00m 0.0000s
+81˚00' 0.000"

Amp. and Phase vs. time for each freq., 5 segs, 1 APs / seg (0.80 sec / seg.), time ticks 1 sec

All

Validity U / L

pcal θ

A:V -90:-90
A:V 0:0

A   0
V   0

A   W00U
V   W00U

		Freq (MHz)
100000.00		
-0.2		Phase
501.6		Ampl.
65.0		Sbd box
U/L 5/0		APs used
A 0		PC freqs
V 0		PC freqs
A:V -90:-90		PC phase
A:V 0:0		ManI PC
A 0		PC amp
V 0		
A W00U		Chan ids
V W00U		Chan ids

	RMS	Theor.		Apriori delay (usec)		Resid mbdelay (usec)		+/-
Group delay (usec)			0.00000000000E+00	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/- 2.5E-05
Sband delay (usec)			-2.72121744800E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.72122E-04	+/- 2.5E-05
Phase delay (usec)			-6.42672937139E-09	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-6.42673E-09	+/- 4.6E-09
Delay rate (us/s)			2.46909320572E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	2.46909E-10	+/- 2.0E-09
Total phase (deg)			-0.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-0.2	+/- 0.2

	RMS	Theor.	Amplitude	501.635 +/- 0.731	Pcal mode: NORMAL, NORMAL	Pcal period (AP's) 9999, 9999	
ph/seg (deg)	0.0	0.2	Search (16X8)	501.579	Pcal rate: -5.000E-04, -5.000E-04 (us/s)	sb window (us)	-0.500 0.500
amp/seg (%)	0.0	0.3	Interp.	501.579	Bits/sample: 2	SampCntNorm: disabled	mb window (us)	-0.000 0.000
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	501.632	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.006 0.006
amp/frq (%)	0.0	0.0	Inc. frq. avg.	501.634	Data rate(Mb/s): 128	nlags: 64 t_cohere infinite	ion window (TEC) 0.00 0.00

A: az 347.8 el 43.8 pa 94.6   V: az 347.8 el 43.8 pa 94.6   u,v (fr/asec) 0.000 0.000   iterative interpolator
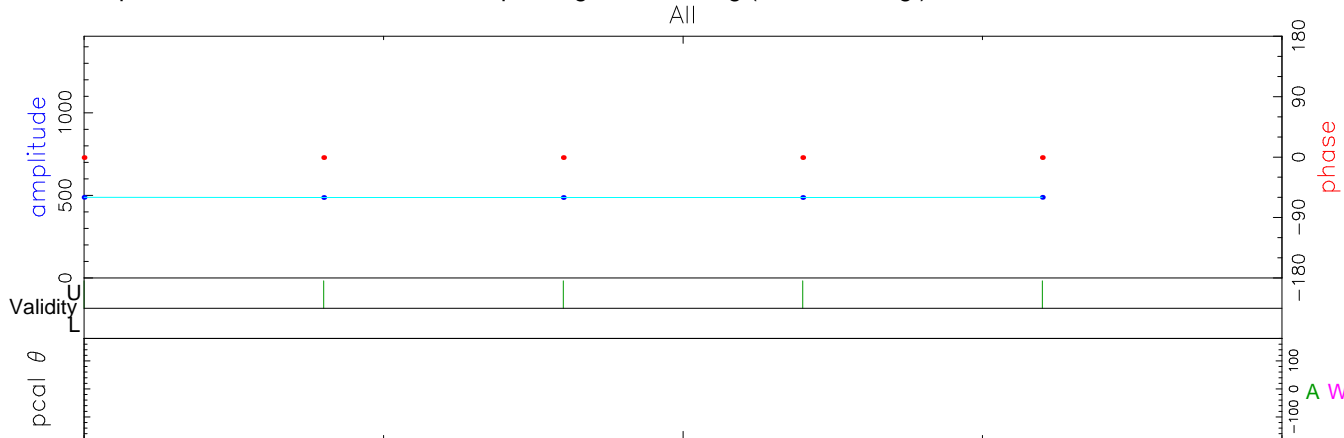
Control file: cf-7000   Input file: /data-sc01/gbc/alma/h4-7000/7000/187-1805/AV..wgnvoc   Output file: /data-sc01/gbc/alma/h4-7000/7000/187-1805/AV.W.2.wgnvoc
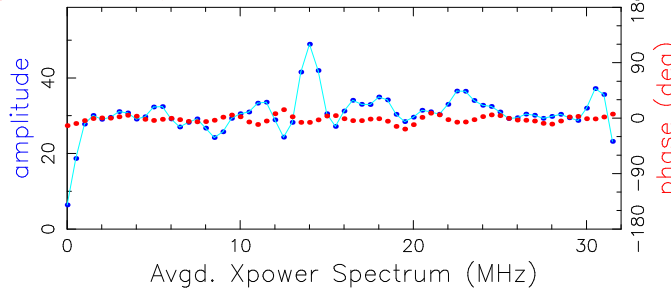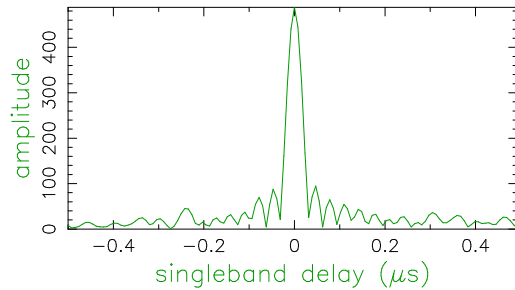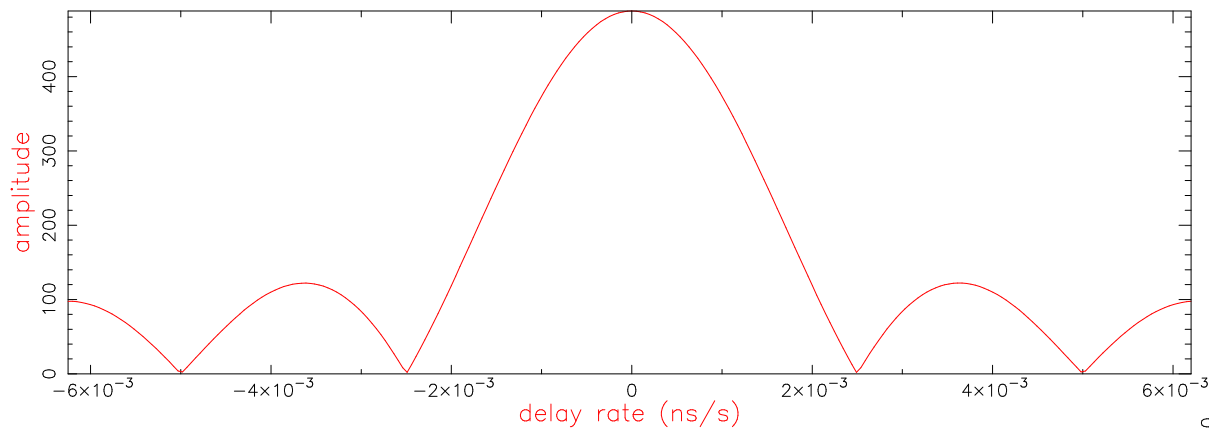
Fringe quality   9
Error code H
SNR   667.6
Int time   4.000
Amp   488.284
Phase   -0.6
PFD   0.0e+00
Delays (us)
SBD   0.000199
MBD   0.000000
Fringe rate (Hz)
-0.000011
Ion TEC   0.00
Ref freq (MHz)
100000.0000
AP (sec)   0.800

Exp.   h4
Exper #   7000
Yr:day 2012:187
Start 180503.00
Stop 180507.00
FRT 180505.00
Corr/FF/build
2012:186:181155
2012:187:181302
2012:187:083214
RA & Dec (J2000)
03h00m 0.0000s
+81˚00' 0.000"

delay rate (ns/s)

singleband delay (μs)

Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 5 segs, 1 APs / seg (0.80 sec / seg.), time ticks 1 sec

All

Validity

pcal θ

A W

		Freq (MHz)
100000.00		Phase
-0.6		Ampl.
488.3		Sbd box
65.0		APs used
U/L 5/0		PC freqs
A 0		PC freqs
W 0		PC phase
A:W -90:-90		Manl PC
A:W 0:0		PC amp
A 0		
W 0		
A W00U		Chan ids
W W00U		Chan ids

Group delay (usec)	0.00000000000E+00	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/-	2.6E-05
Sband delay (usec)	1.99069769937E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.99070E-04 +/-	2.6E-05
Phase delay (usec)	-1.61656167185E-08	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.61656E-08 +/-	4.8E-09
Delay rate (us/s)	-1.09962040233E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.09962E-10 +/-	2.1E-09
Total phase (deg)	-0.6	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-0.6 +/-	0.2

	RMS	Theor.	Amplitude	488.284 +/- 0.731	Pcal mode: NORMAL, NORMAL	Pcal period (AP's) 9999, 9999	
ph/seg (deg)	0.0	0.2	Search (16X8)	488.254	Pcal rate: -5.000E-04, -5.000E-04 (us/s)	sb window (us)	-0.500 0.500
amp/seg (%)	0.0	0.3	Interp.	488.254	Bits/sample: 2	SampCntNorm: disabled	mb window (us) -0.000 0.000
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	488.281	Sample rate(MSamp/s): 64	dr window (ns/s) -0.006 0.006
amp/frq (%)	0.0	0.0	Inc. frq. avg.	488.283	Data rate(Mb/s): 128	nlags: 64 t_cohere infinite	ion window (TEC)

A: az 347.8 el 43.8 pa 94.6   W: az 347.8 el 43.8 pa 94.6   u,v (fr/asec) 0.000 0.000   iterative interpolator
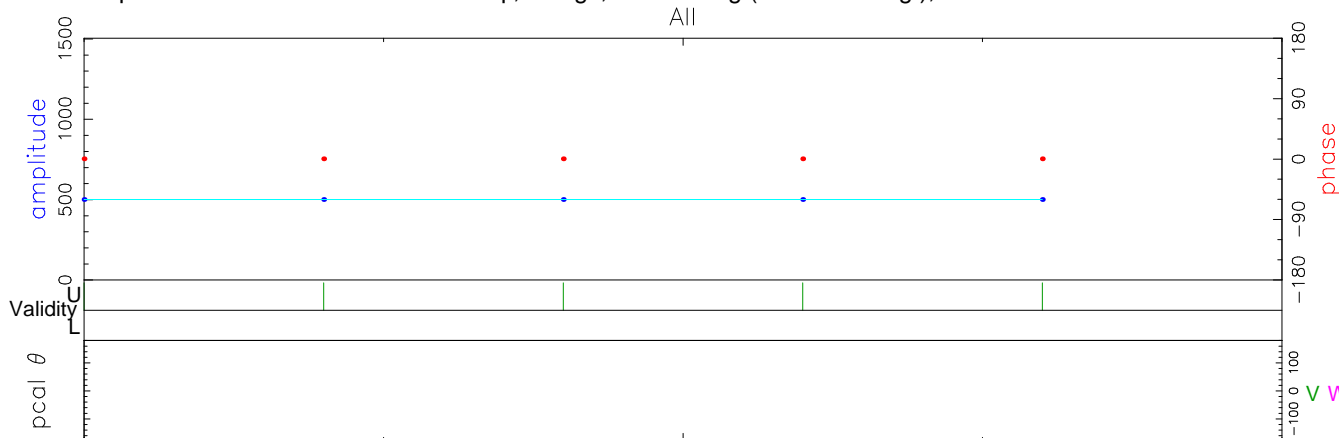
Control file: cf-7000   Input file: /data-sc01/gbc/alma/h4-7000/7000/187-1805/AW..wgnvoc   Output file: /data-sc01/gbc/alma/h4-7000/7000/187-1805/AW.W.3.wgnvoc

Mk4/DiFX fearfit 3.8 rev 747

Noise.wgnvoc, 187-1805, VW
Vt - Wt, fgroup W, pol RR
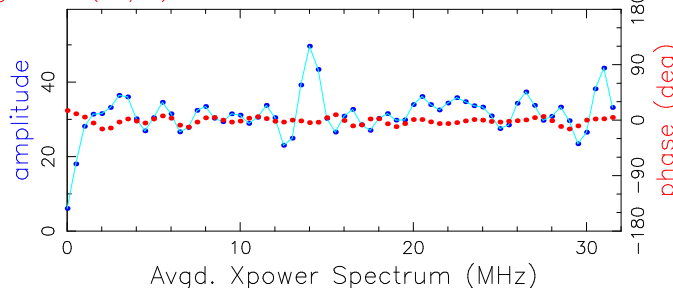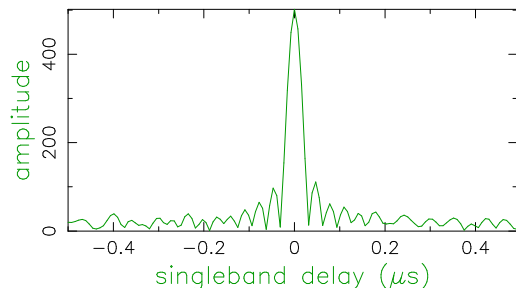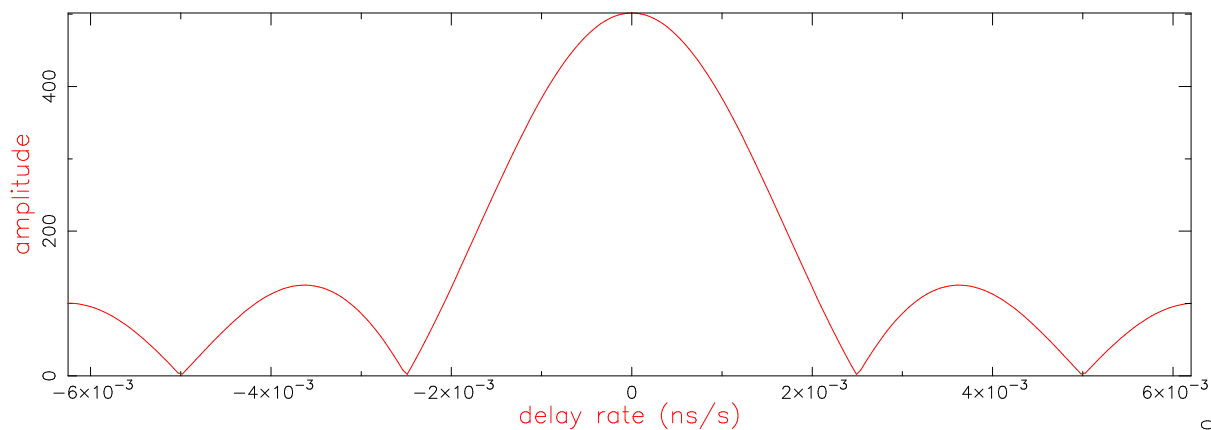
Fringe quality   9
Error code H
SNR   685.9
Int time   4.000
Amp   501.748
Phase   0.5
PFD   0.0e+00
Delays (us)
SBD   0.000322
MBD   0.000000
Fringe rate (Hz)
          0.000003
Ion TEC   0.00
Ref freq (MHz)
       100000.0000
AP (sec)   0.800

Exp.   h4
Exper #   7000
Yr:day 2012:187
Start   180503.00
Stop   180507.00
FRT   180505.00
Corr/FF/build
2012:186:181155
2012:187:181308
2012:187:083214
RA & Dec (J2000)
03h00m 0.0000s
+81˚00' 0.000"

amplitude (top plot, delay rate (ns/s))

amplitude (singleband delay (µs))

amplitude / phase (deg) (Avgd. Xpower Spectrum (MHz))

Amp. and Phase vs. time for each freq., 5 segs, 1 APs / seg (0.80 sec / seg.), time ticks 1 sec

All

amplitude / phase

Validity U / L

pcal θ   V W

100000.00   Freq (MHz)
0.5   Phase
501.7   Ampl.
65.0   Sbd box
U/L 5/0   APs used
V 0   PC freqs
W 0   PC freqs
V:W -90:-90   PC phase
V:W 0:0   Manl PC
V 0   PC amp
W 0
V W00U   Chan ids
W W00U   Chan ids

	RMS	Theor.			
Group delay (usec)			0.00000000000E+00	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.5E-05
Sband delay (usec)			3.21513609859E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.21514E-04	+/-	2.5E-05
Phase delay (usec)			1.39721781502E-08	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.39722E-08	+/-	4.6E-09
Delay rate (us/s)			3.43375594885E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	3.43376E-11	+/-	2.0E-09
Total phase (deg)			0.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	0.5	+/-	0.2

	RMS	Theor.	Amplitude	501.748 +/- 0.731	Pcal mode: NORMAL, NORMAL	Pcal period (AP's) 9999, 9999	
ph/seg (deg)	0.0	0.2	Search (16X8)	501.666	Pcal rate: -5.000E-04, -5.000E-04 (us/s)	sb window (us)	-0.500 0.500
amp/seg (%)	0.0	0.3	Interp.	501.666	Bits/sample: 2	SampCntNorm: disabled	mb window (us)	-0.000 0.000
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	501.745	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.006 0.006
amp/frq (%)	0.0	0.0	Inc. frq. avg.	501.747	Data rate(Mb/s): 128	nlags: 64	t_cohere infinite	ion window (TEC)	0.00 0.00

V: az 347.8 el 43.8 pa 94.6   W: az 347.8 el 43.8 pa 94.6   u,v (fr/asec) 0.000 0.000   iterative interpolator

Control file: cf-7000   Input file: /data-sc01/gbc/alma/h4-7000/7000/187-1805/VW..wgnvoc   Output file: /data-sc01/gbc/alma/h4-7000/7000/187-1805/VW.W.4.wgnvoc