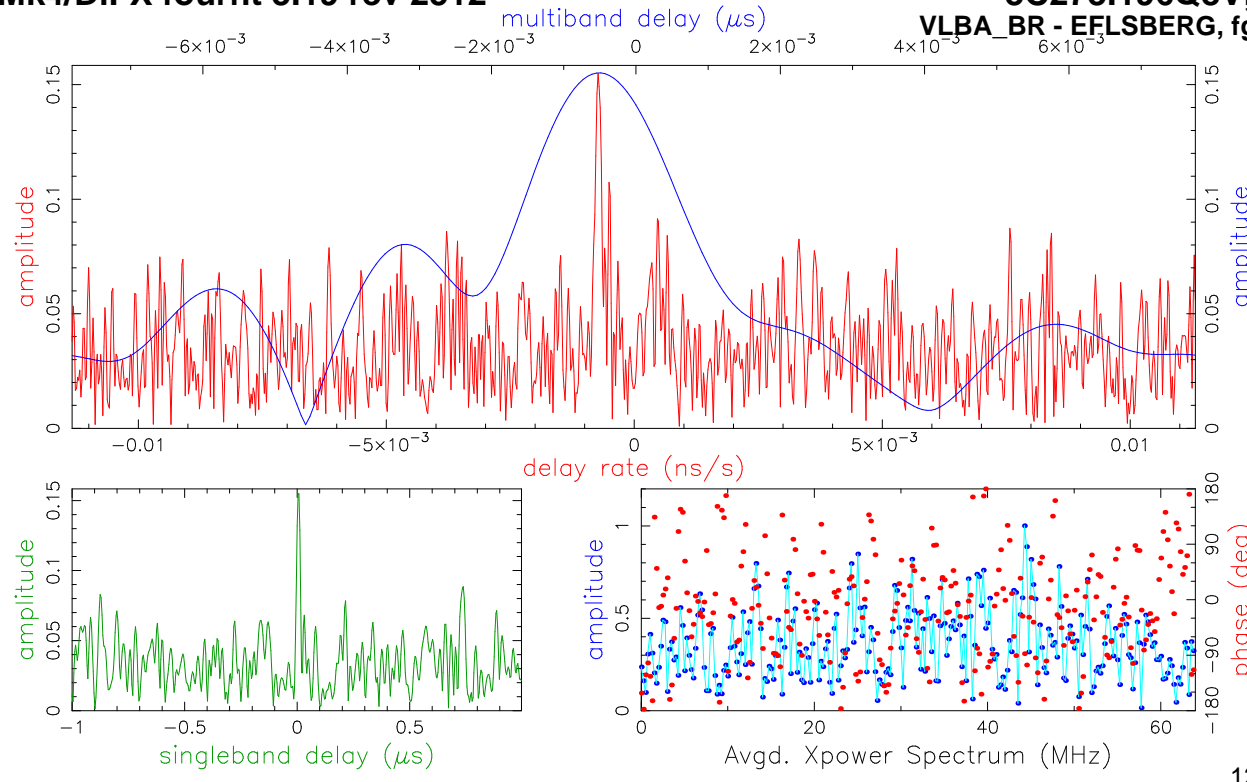


Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, bB
VLBA_BR - EFLSBERG, fgroup W, pol RR

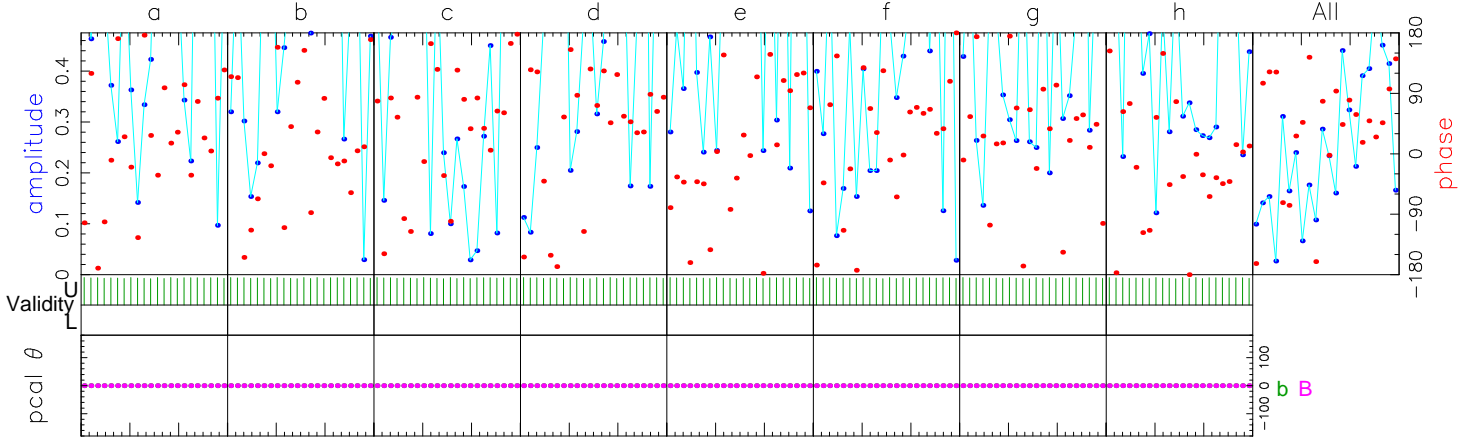


Fringe quality 0

SNR 5.7
Int time 176.800
Amp 0.158
Phase 54.1
PFD 6.7e-01
Delays (us)
SBD 0.005839
MBD -0.000591
Fringe rate (Hz)
-0.062810
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153433
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| b:B | 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 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -7.04205099937E+03 | | | | | | | | | |
| Sband delay (usec) | -7.04204456954E+03 | | | | | | | | | |
| Phase delay (usec) | -7.04205040654E+03 | | | | | | | | | |
| Delay rate (us/s) | 1.73490548116E+00 | | | | | | | | | |
| Total phase (deg) | | | -7.1 | | | | | | | |
| 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) | | | | | | | | | 54.1 | +/- 19.9 |

ph/seg (deg) 71.7 46.7
amp/seg (%) 107.2 81.6
ph/frq (deg) 42.4 28.2
amp/frq (%) 36.6 49.2

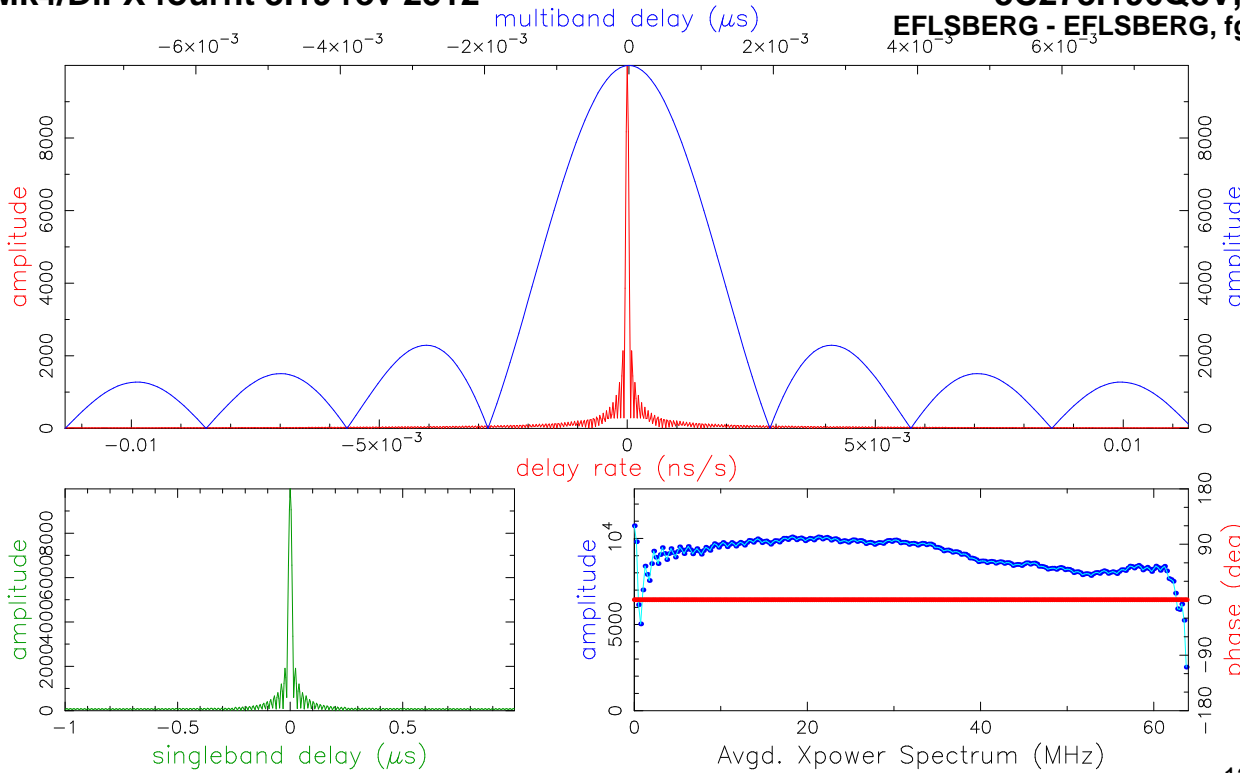
RMS Theor. Amplitude 0.158 +/- 0.028
Search (1024X32) 0.153
Interp. 0.000
Inc. seg. avg. 0.189
Inc. frq. avg. 0.164

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 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

b: az 95.6 el 7.6 pa -41.7 B: az 234.2 el 28.0 pa 31.1 u,v (fr/asec) -9922.638 -137.742 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/bB..196Q8V Output file: /Exps/c201e/v1/1234/No0046/bB.W.11.196Q8V

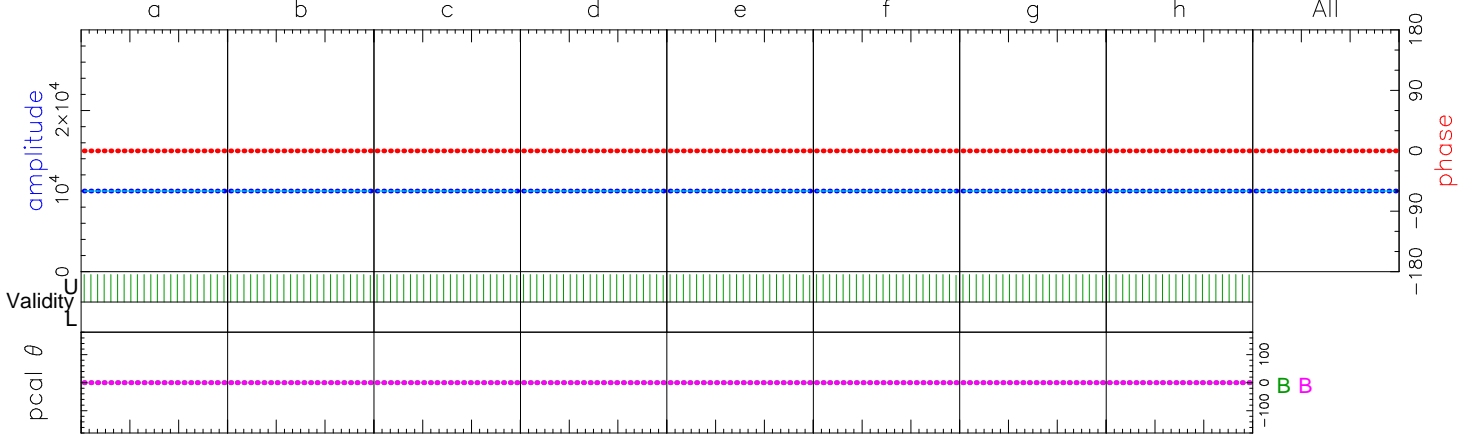


Fringe quality 9

SNR 366863.5
Int time 179.976
Amp 9999.999
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
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153433
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

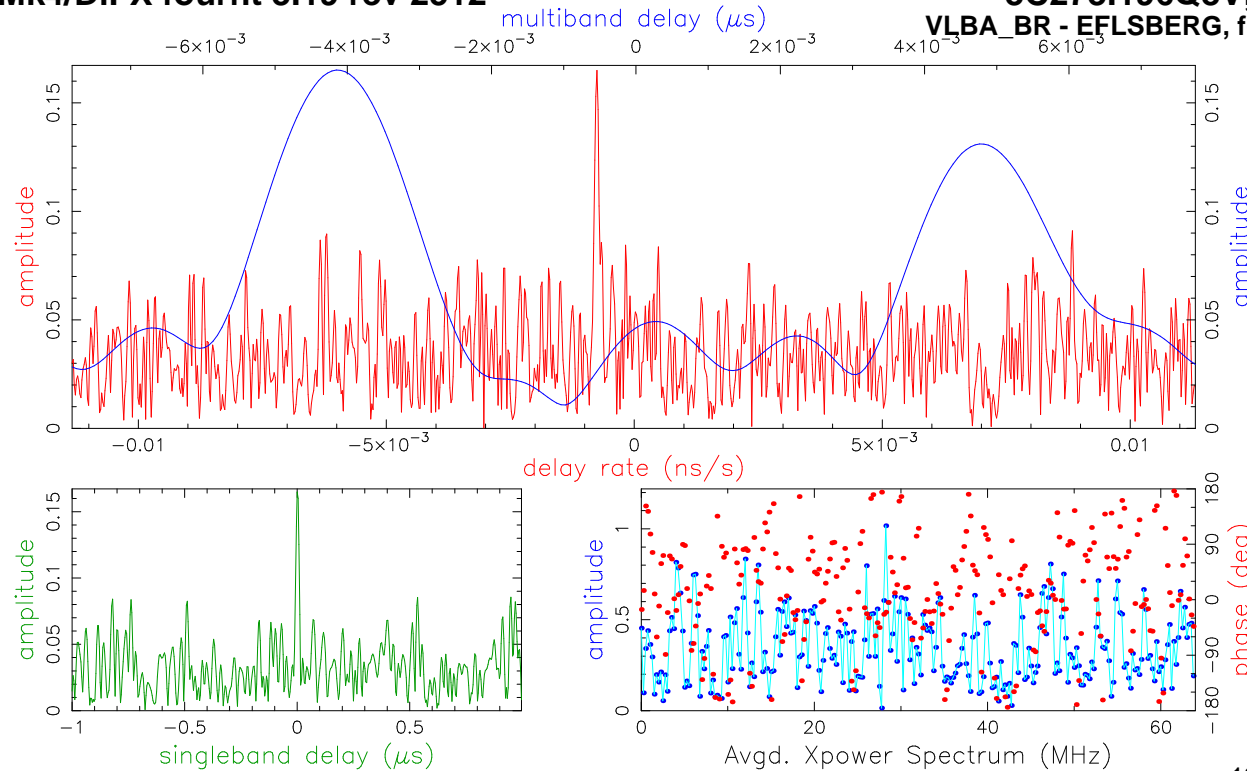


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|---------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 10000.0 | 10000.0 |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 10000.0 | 10000.0 |
| B:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 10000.0 | 10000.0 |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 10000.0 | 10000.0 |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |

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 +/- 2.3E-08
 Phase delay (usec) -1.38408981982E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.38409E-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 +/- 9.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 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. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 234.2 el 28.0 pa 31.1 B: az 234.2 el 28.0 pa 31.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BB..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BB.W.15.196Q8V

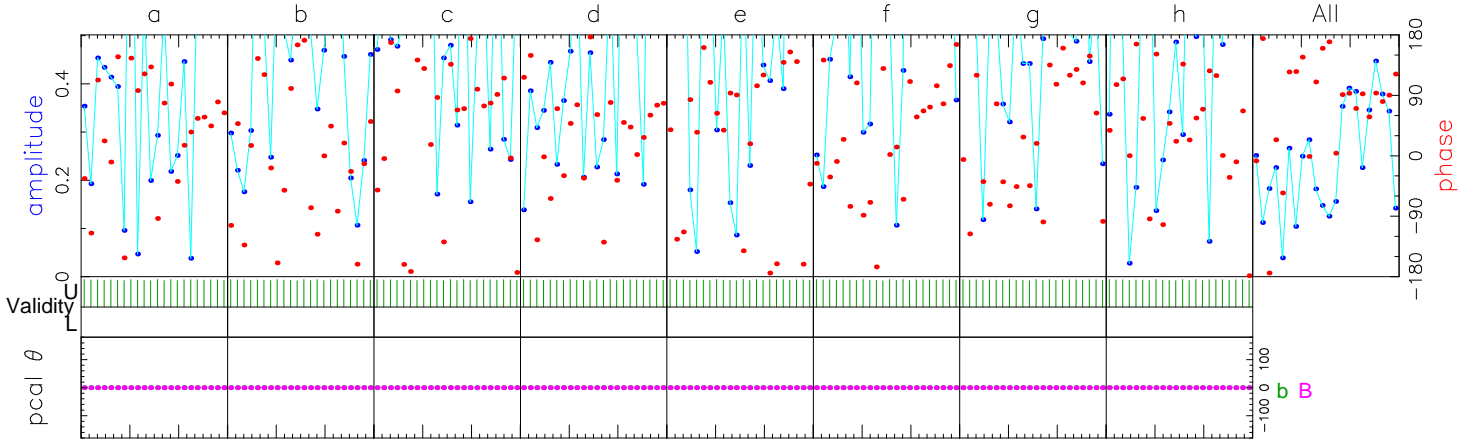


Fringe quality 0

SNR 6.1
Int time 176.800
Amp 0.167
Phase 88.1
PFD 1.5e-01
Delays (us)
SBD 0.001363
MBD -0.004088
Fringe rate (Hz)
-0.065054
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153431
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

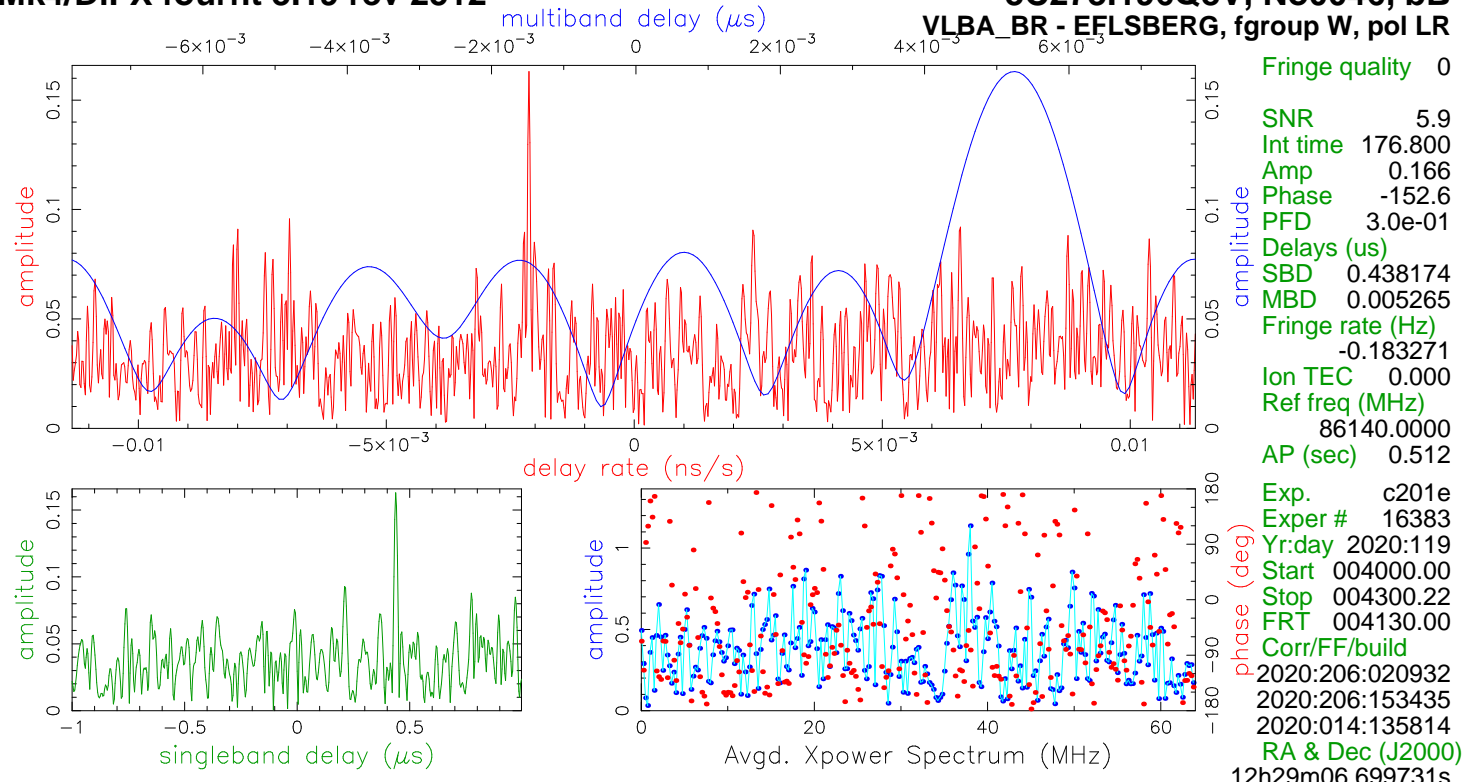


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|------------|----------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| b:B | 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 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -7.04205449595E+03 | | | | | | | | | |
| Sband delay (usec) | -7.04204904529E+03 | | | | | | | | | |
| Phase delay (usec) | -7.04205040545E+03 | | | | | | | | | |
| Delay rate (us/s) | 1.73490545510E+00 | | | | | | | | | |
| Total phase (deg) | | | 26.9 | | | | | | | |
| 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) | | | | | | | | | 88.1 | +/- 18.9 |

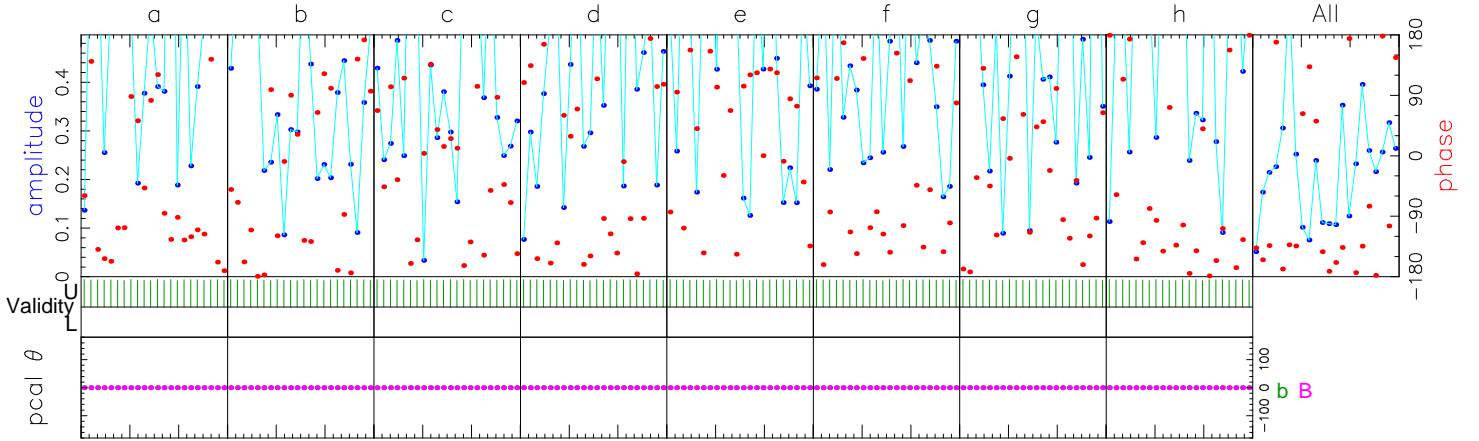
| | RMS | Theor. | Amplitude | 0.167 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 62.8 | 44.3 | Search (1024X32) | 0.161 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 79.9 | 77.2 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 64.4 | 26.7 | Inc. seg. avg. | 0.188 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 54.9 | 46.6 | Inc. frq. avg. | 0.180 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

b: az 95.6 el 7.6 pa -41.7 B: az 234.2 el 28.0 pa 31.1 u,v (fr/asec) -9922.638 -137.742 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/bB..196Q8V Output file: /Exps/c201e/v1/1234/No0046/bB.W.2.196Q8V

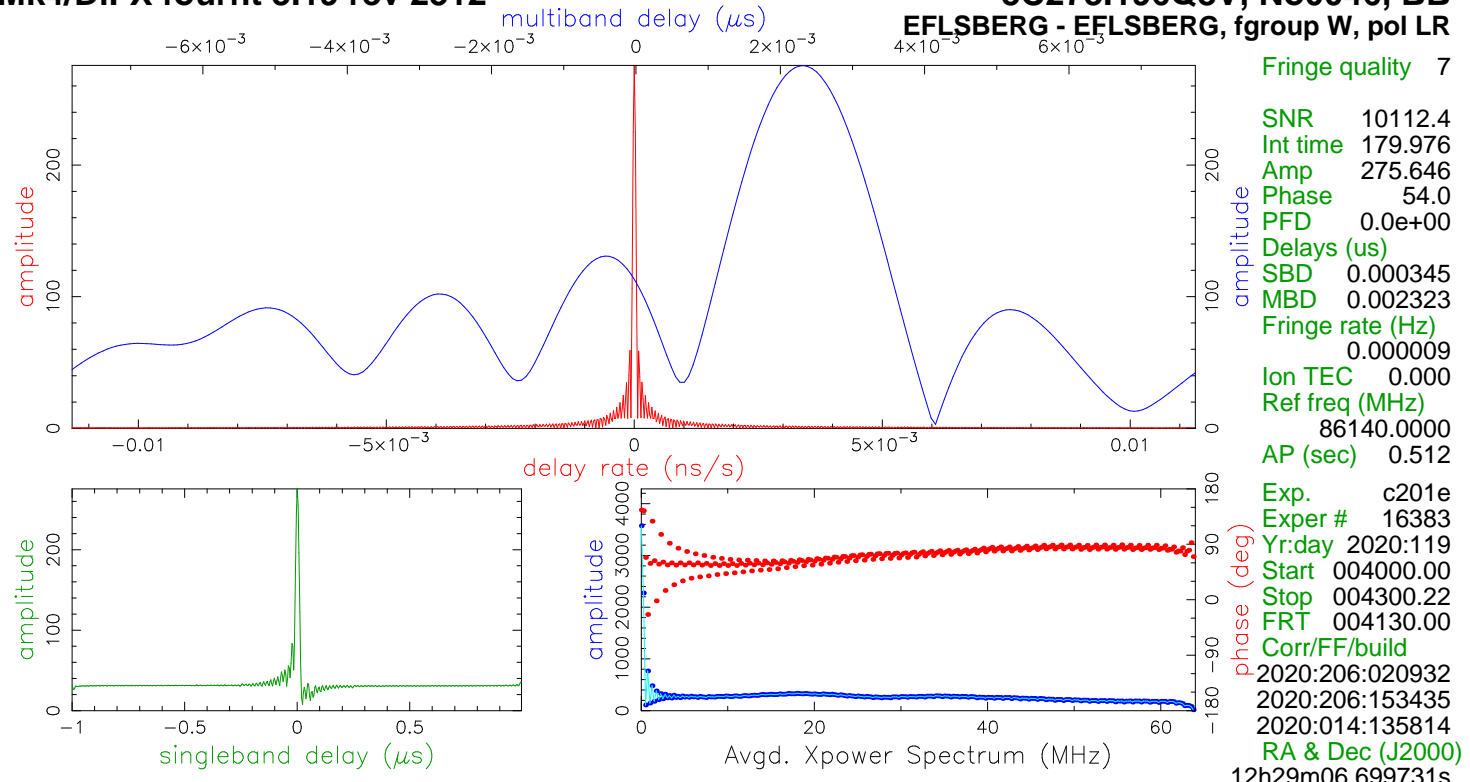


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

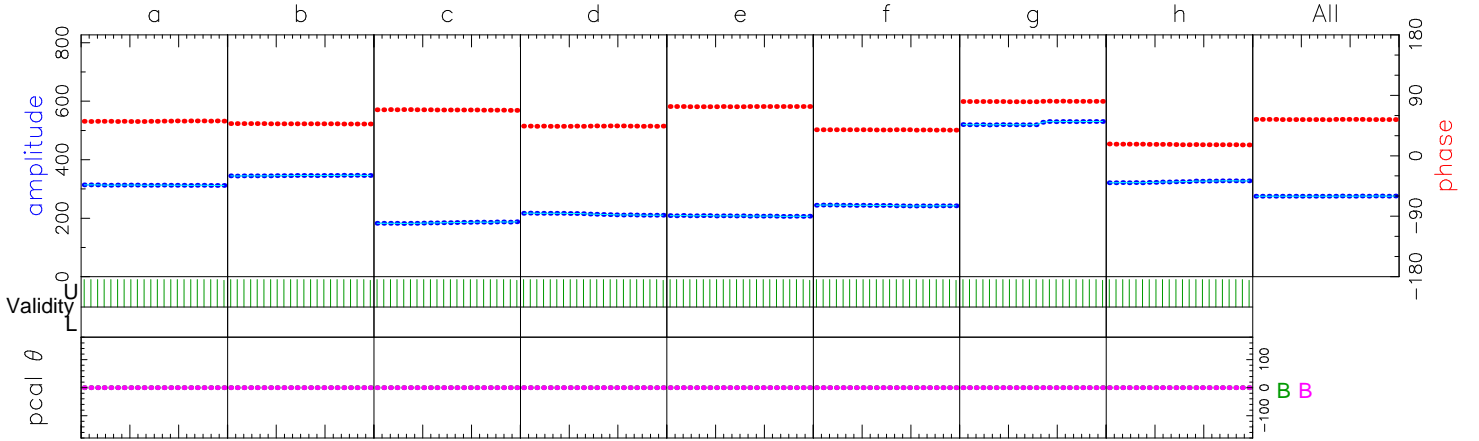


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|--------------------|----------------------|--------------|----------|----------|------------|--------|
| | -143.7 | -148.2 | -142.9 | -161.4 | 144.0 | -164.1 | -109.5 | -150.8 | Phase | -152.6 |
| | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.3 | Ampl. | 0.2 |
| | 370.7 | 456.3 | 178.0 | 34.6 | 10.9 | 254.6 | 210.1 | 369.2 | Sbd box | 369.2 |
| 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 | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| b:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| b:B | 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 | PC amp | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -7.04160764296E+03 | | Apriori delay (usec) | -7.04205040829E+03 | Resid mbdelay (usec) | 5.26533E-03 | +/- | 1.8E-04 | | |
| Sband delay (usec) | -7.04161223454E+03 | | Apriori clock (usec) | -1.4435240E+01 | Resid sbdelay (usec) | 4.38174E-01 | +/- | 1.4E-03 | | |
| Phase delay (usec) | -7.04205041321E+03 | | Apriori clockrate (us/s) | 1.5800000E-07 | Resid phdelay (usec) | -4.92227E-06 | +/- | 6.2E-07 | | |
| Delay rate (us/s) | 1.73490408272E+00 | | Apriori rate (us/s) | 1.73490621031E+00 | Resid rate (us/s) | -2.12759E-06 | +/- | 6.0E-09 | | |
| Total phase (deg) | | -213.9 | Apriori accel (us/s/s) | 3.72547222453E-05 | Resid phase (deg) | -152.6 | +/- | 19.3 | | |

ph/seg (deg) 56.5 45.2 Search (1024X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.2 78.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.4 27.3 Inc. seg. avg. 0.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.8 47.6 Inc. frq. avg. 0.159 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 95.6 el 7.6 pa -41.7 B: az 234.2 el 28.0 pa 31.1 u,v (fr/asec) -9922.638 -137.742 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/bB..196Q8V Output file: /Exps/c201e/v1/1234/No0046/bB.W.25.196Q8V

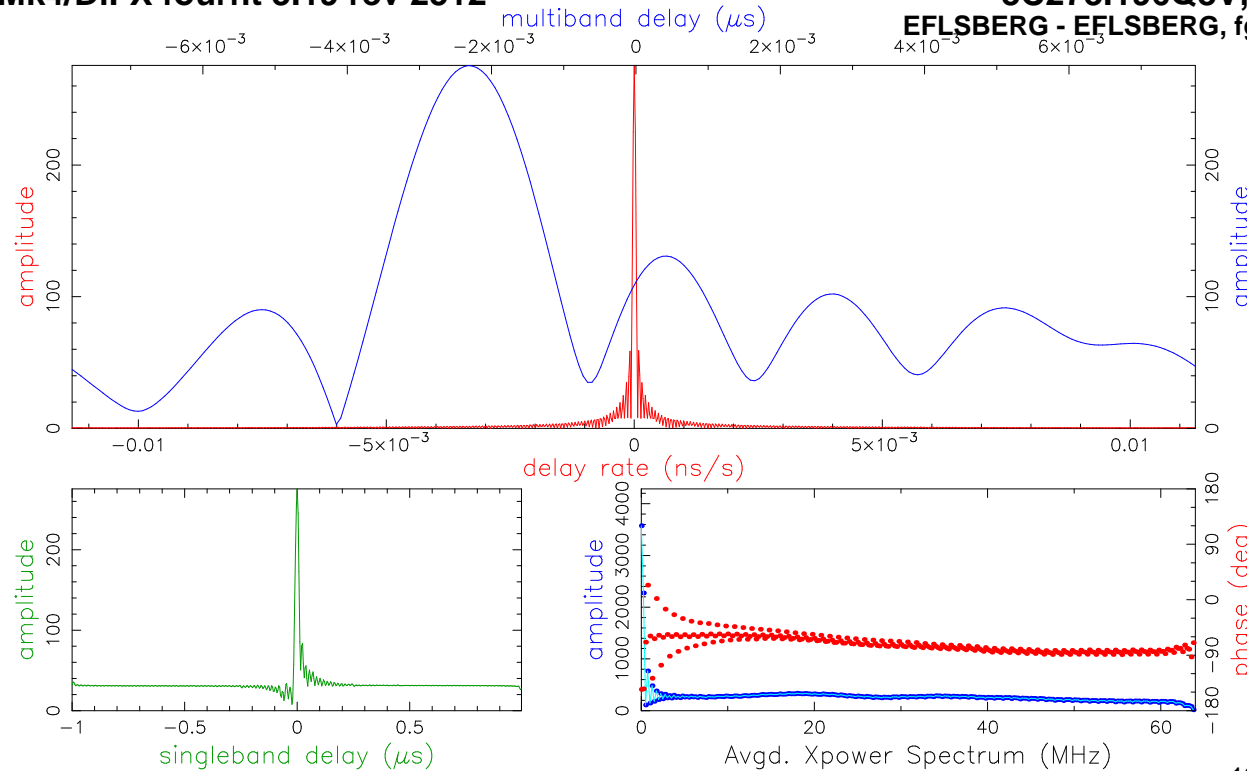


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



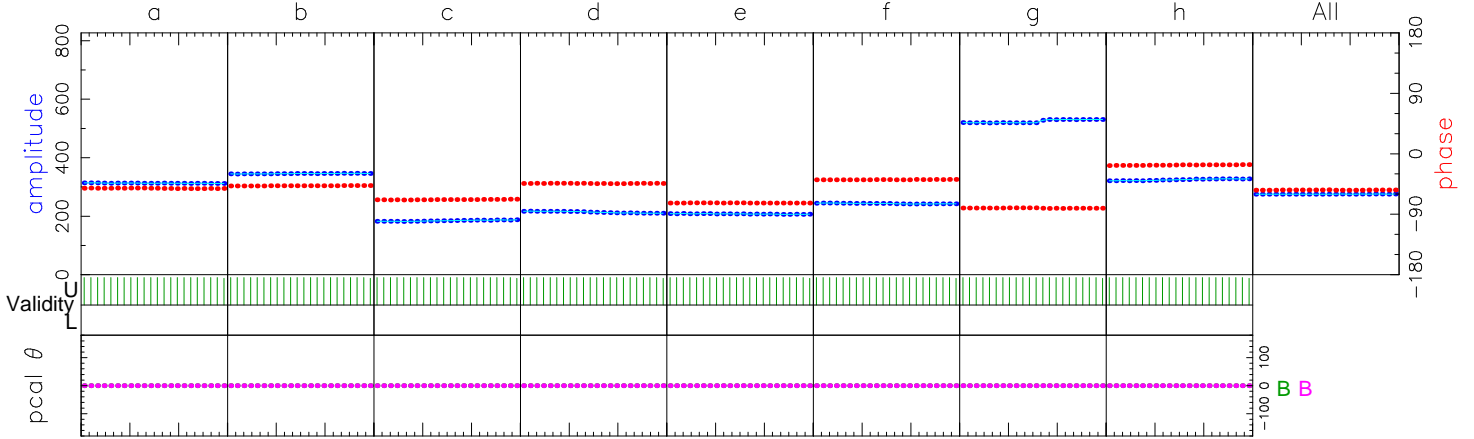
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|--------------------------|----------|-------------------|----------|----------------------|-------------|------------|---------|
| 51.4 | 47.6 | 68.2 | 44.1 | 73.2 | 38.5 | 80.8 | 16.7 | | Phase | 54.0 |
| 313.0 | 345.6 | 184.8 | 213.9 | 207.9 | 243.5 | 524.4 | 324.6 | | Ampl. | 294.7 |
| 257.7 | 257.3 | 257.4 | 258.1 | 257.1 | 257.4 | 256.3 | 256.5 | | Sbd box | 257.1 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | APs used | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | |
| B:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase | |
| B:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | Mani PC | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 2.32250000000E-03 | | Apriori delay (usec) | | 0.00000000000E+00 | | Resid mbdelay (usec) | 2.32250E-03 | +/- | 1.1E-07 |
| Sband delay (usec) | 3.44750000000E-04 | | Apriori clock (usec) | | 0.0000000E+00 | | Resid sbdelay (usec) | 3.44750E-04 | +/- | 8.5E-07 |
| Phase delay (usec) | 1.74025605452E-06 | | Apriori clockrate (us/s) | | 0.0000000E+00 | | Resid phdelay (usec) | 1.74026E-06 | +/- | 3.7E-10 |
| Delay rate (us/s) | 1.03449412459E-10 | | Apriori rate (us/s) | | 0.00000000000E+00 | | Resid rate (us/s) | 1.03449E-10 | +/- | 3.5E-12 |
| Total phase (deg) | | 54.0 | Apriori accel (us/s/s) | | 0.00000000000E+00 | | Resid phase (deg) | 54.0 | +/- | 0.0 |

| | RMS | Theor. | Amplitude | 275.646 +/- 0.027 | Pcal mode: MANUAL, MANUAL | PC period (AP's) | 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-------------------|----------------------------------------|----------------------|-------------------|------------------|--------|-------|
| ph/seg (deg) | 0.1 | 0.0 | Search (1024X32) | 273.206 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 0.1 | 0.0 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 22.6 | 0.0 | Inc. seg. avg. | 275.447 | Sample rate(MISamp/s): 128 | | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 38.1 | 0.0 | Inc. frq. avg. | 294.713 | Data rate(Mb/s): 2048 | nlags: 256 | t_cohere infinite | | | |



Fringe quality 7
SNR 10112.4
Int time 179.976
Amp 275.646
Phase -54.0
PFD 0.0e+00
Delays (us)
SBD -0.000345
MBD -0.002323
Fringe rate (Hz)
-0.000009
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153436
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

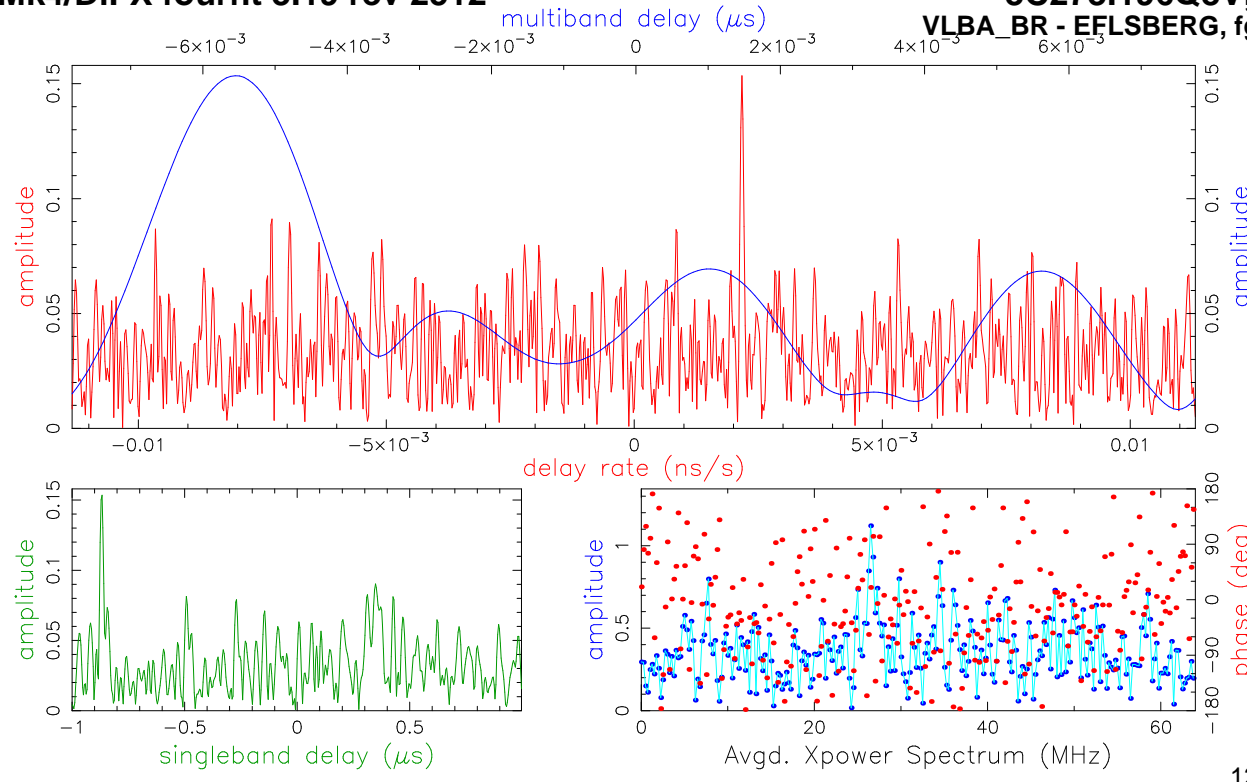


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|-------------------|----------|----------------------|----------|--------------|-------------|
| | -51.4 | -47.6 | -68.2 | -44.1 | -73.2 | -38.5 | -80.8 | -16.7 | Phase | -54.0 |
| | 313.0 | 345.6 | 184.8 | 213.9 | 207.9 | 243.5 | 524.4 | 324.6 | Ampl. | 294.7 |
| | 256.3 | 256.7 | 256.6 | 255.9 | 256.9 | 256.6 | 257.7 | 257.5 | Sbd box | 256.9 |
| 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 | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:B | 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 | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -2.32250000000E-03 | | Apriori delay (usec) | | 0.00000000000E+00 | | Resid mbdelay (usec) | | -2.32250E-03 | +/- 1.1E-07 |
| Sband delay (usec) | -3.44750000000E-04 | | Apriori clock (usec) | | 0.0000000E+00 | | Resid sbdelay (usec) | | -3.44750E-04 | +/- 8.5E-07 |
| Phase delay (usec) | -1.74025605450E-06 | | Apriori clockrate (us/s) | | 0.0000000E+00 | | Resid phdelay (usec) | | -1.74026E-06 | +/- 3.7E-10 |
| Delay rate (us/s) | -1.03449412459E-10 | | Apriori rate (us/s) | | 0.00000000000E+00 | | Resid rate (us/s) | | -1.03449E-10 | +/- 3.5E-12 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 0.00000000000E+00 | | Resid phase (deg) | | -54.0 | +/- 0.0 |

ph/seg (deg) 0.1 0.0 Theor. Amplitude 275.646 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.1 0.0 Search (1024X32) 273.206 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.1 0.0 Inc. seg. avg. 275.447 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 294.713 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, bB
VLBA_BR - EFLSBERG, fgroup W, pol RL

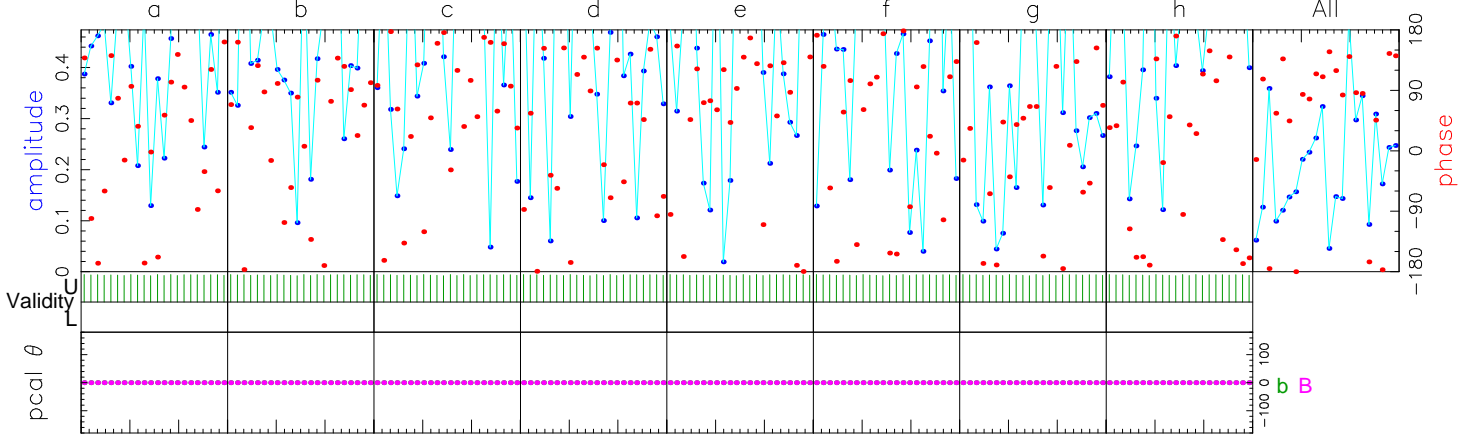


Fringe quality 0

SNR 5.7
Int time 176.800
Amp 0.158
Phase 114.9
PFD 8.5e-01
Delays (us)
SBD -0.868701
MBD -0.005563
Fringe rate (Hz)
0.186902
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153437
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| b:B | 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 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -7.04291534639E+03 | | | | | | | | | |
| Sband delay (usec) | -7.04291910904E+03 | | | | | | | | | |
| Phase delay (usec) | -7.04205040459E+03 | | | | | | | | | |
| Delay rate (us/s) | 1.73490838007E+00 | | | | | | | | | |
| Total phase (deg) | | | 53.6 | | | | | | | |
| 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) | | | | | | | | | | |

ph/seg (deg) 51.8 47.5 51.8 47.5
amp/seg (%) 79.1 82.9 79.1 82.9
ph/frq (deg) 39.4 28.6 39.4 28.6
amp/frq (%) 37.0 50.0 37.0 50.0

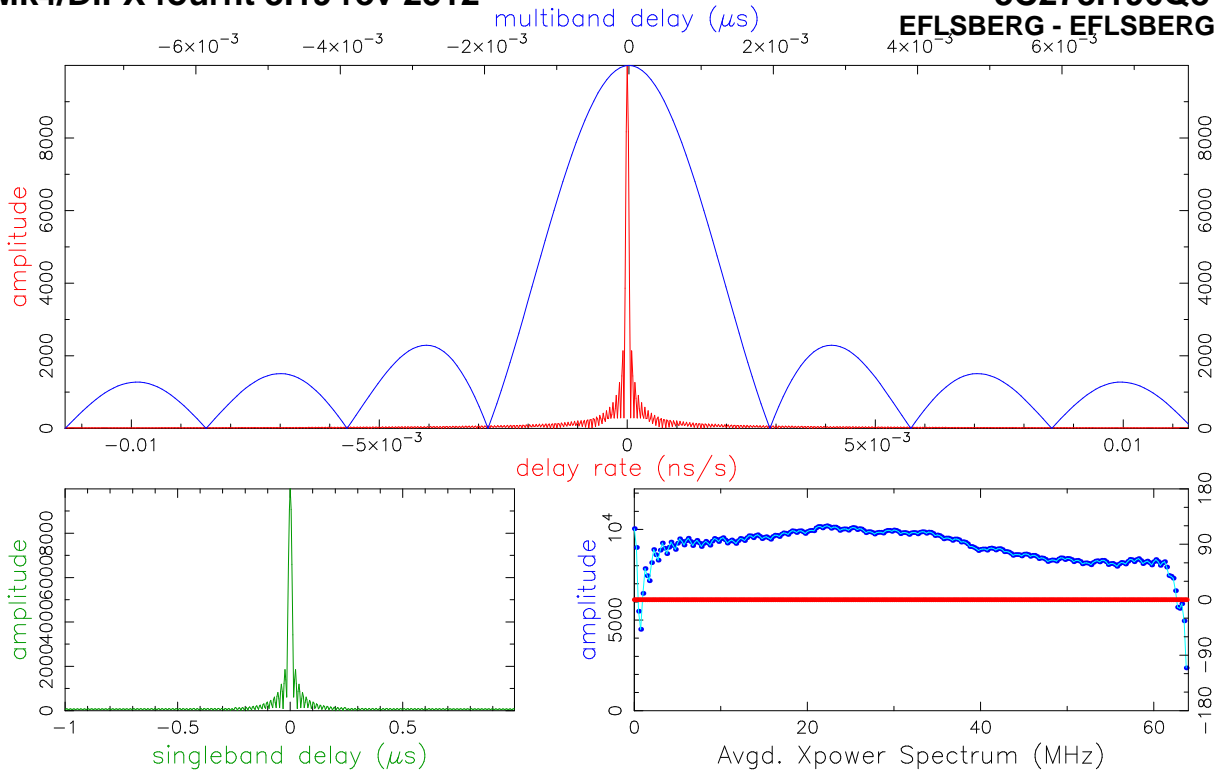
RMS Theor. Amplitude 0.158 +/- 0.028
Search (1024X32) 0.151
Interp. 0.000
Inc. seg. avg. 0.159
Inc. frq. avg. 0.161

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 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

b: az 95.6 el 7.6 pa -41.7 B: az 234.2 el 28.0 pa 31.1 u,v (fr/asec) -9922.638 -137.742 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/bB..196Q8V Output file: /Exps/c201e/v1/1234/No0046/bB.W.37.196Q8V

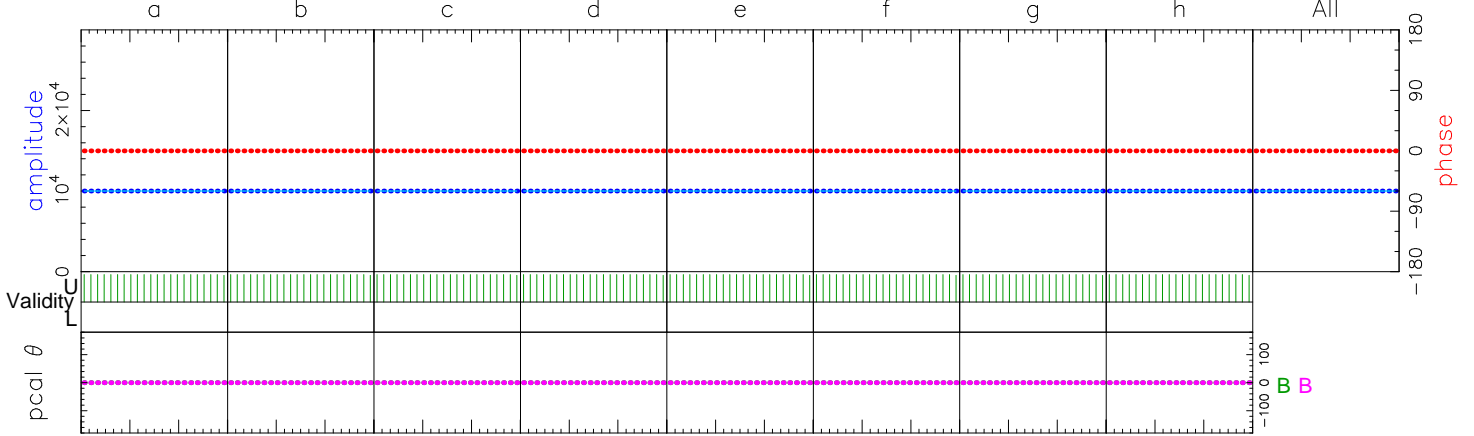


Fringe quality 9

SNR 366863.5
Int time 179.976
Amp 9999.999
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 004130.00
Corr/FF/build
2020:206:020932
2020:206:153431
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

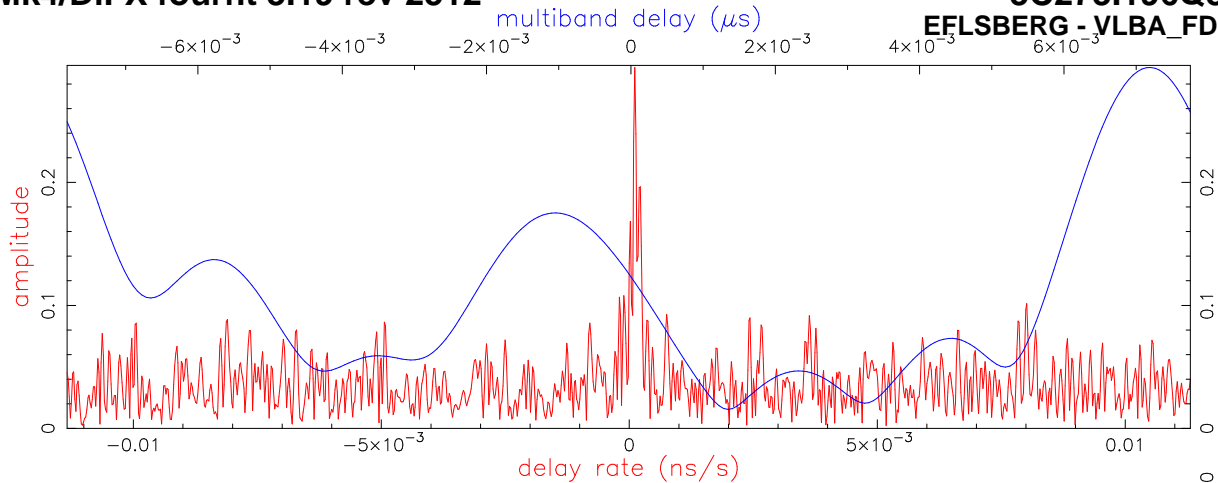


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|---------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 10000.0 | 10000.0 |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Ampl. | 10000.0 |
| B:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Sbd box | 257.0 |
| B:B | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | APs used | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Mani PC | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | PC amp | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| B | 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 +/- 2.3E-08
 Phase delay (usec) -1.39678278161E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.39678E-20 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.000 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. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

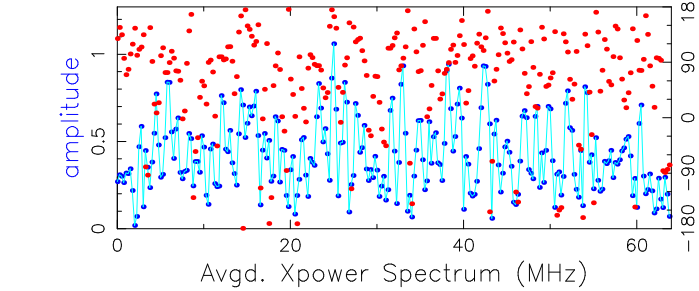
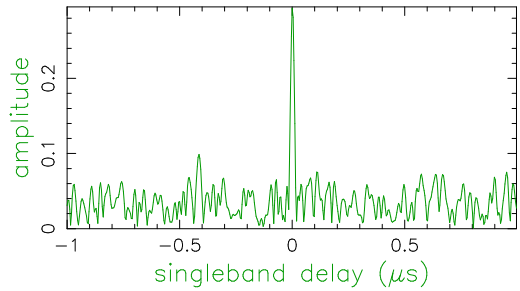
B: az 234.2 el 28.0 pa 31.1 B: az 234.2 el 28.0 pa 31.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BB..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BB.W.4.196Q8V



Fringe quality 9

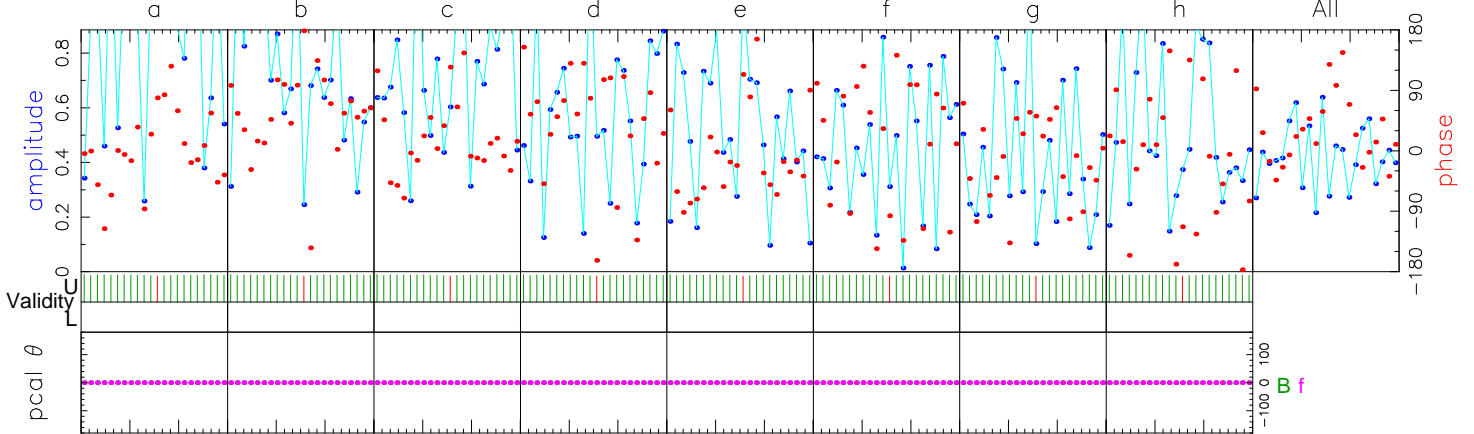
SNR 10.7
Int time 176.211
Amp 0.295
Phase 22.5
PFD 2.0e-18
Delays (us)
SBD 0.001012
MBD 0.007210
Fringe rate (Hz) 0.009605
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build 2020:206:020932
2020:206:153434
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"



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



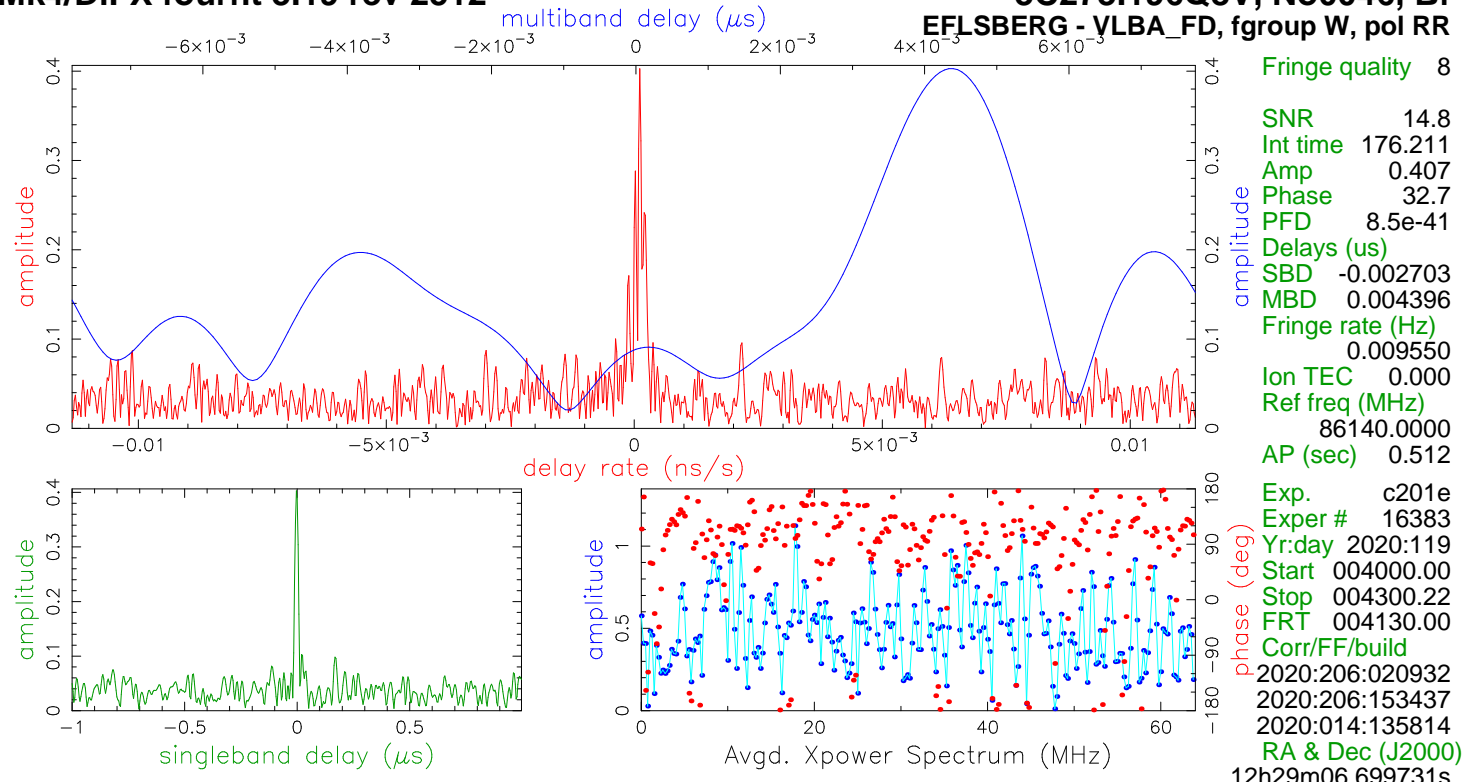
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |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

| | | | | | | | | | | |
|-------------------------|--------------------|--------------------------|------------------------|--------------------|----------------------|-------------------|-------------|------|---------|------|
| Group delay (usec)(sbd) | 1.73797006790E+03 | Apriori delay (usec) | | 1.73796285765E+03 | Resid mbdelay (usec) | | 7.21025E-03 | +/- | 1.0E-04 | |
| Sband delay (usec) | 1.73796386990E+03 | Apriori clock (usec) | | 9.0984631E+00 | Resid sbdelay (usec) | | 1.01225E-03 | +/- | 8.0E-04 | |
| Phase delay (usec) | 1.73796285837E+03 | Apriori clockrate (us/s) | | -3.0900000E-07 | Resid phdelay (usec) | | 7.24233E-07 | +/- | 3.4E-07 | |
| Delay rate (us/s) | -1.91967149992E+00 | Apriori rate (us/s) | | -1.91967161143E+00 | Resid rate (us/s) | | 1.11509E-07 | +/- | 3.3E-09 | |
| Total phase (deg) | | 223.3 | Apriori accel (us/s/s) | | -8.19082693796E-06 | Resid phase (deg) | | 22.5 | +/- | 10.7 |

| | | | | | | | | | | | |
|--------------|------|------|------------------|--|-------|----------------------------------------|--|-----------------------|-------------------|------------------|-----------|
| ph/seg (deg) | 50.9 | 25.1 | Search (1024X32) | | 0.290 | Pcal mode: MANUAL, MANUAL | | PC period (AP's) 5, 5 | | | |
| amp/seg (%) | 57.7 | 43.8 | Interp. | | 0.000 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | -1.000 1.000 | | |
| ph/frq (deg) | 37.0 | 15.1 | Inc. seg. avg. | | 0.385 | Bits/sample: 2x2 | | SampCntNorm: enabled | mb window (us) | -0.008 0.008 | |
| amp/frq (%) | 50.4 | 26.4 | Inc. frq. avg. | | 0.330 | Sample rate(MISamp/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 |

B: az 234.2 el 28.0 pa 31.1 f: az 101.6 el 22.3 pa -57.5 u,v (fr/asec) 10996.925 2295.988 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bf..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bf.W.17.196Q8V



Fringe quality 8

SNR 14.8

Int time 176.211

Amp 0.407

Phase 32.7

PFD 8.5e-41

Delays (us)

SBD -0.002703

MBD 0.004396

Fringe rate (Hz) 0.009550

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 004000.00

Stop 004300.22

FRT 004130.00

Corr/FF/build

2020:206:020932

2020:206:153437

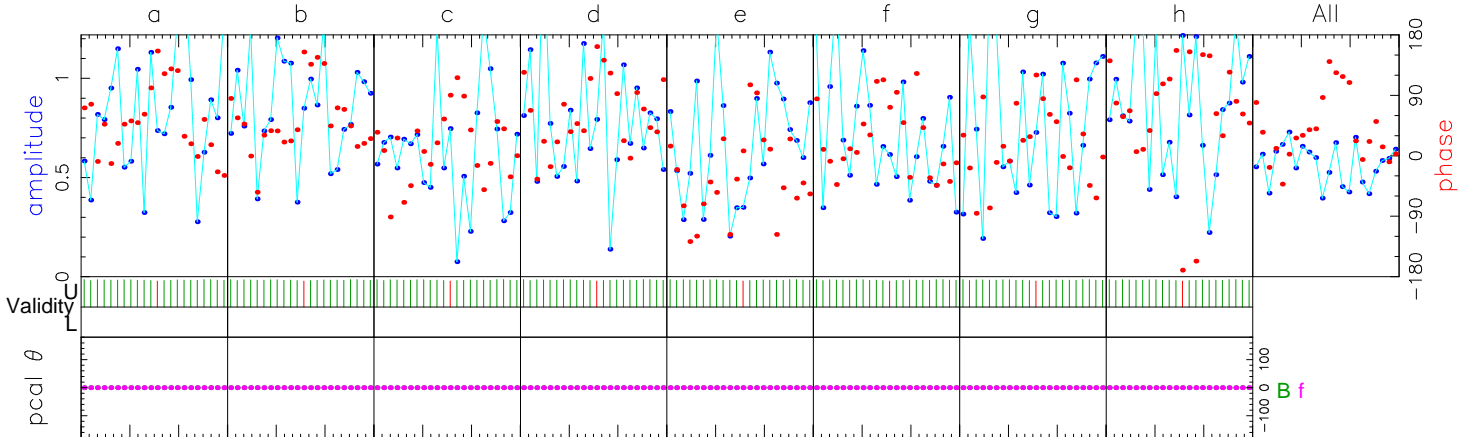
2020:014:135814

RA & Dec (J2000)

12h29m06.699731s

+02°03'08.598201"

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

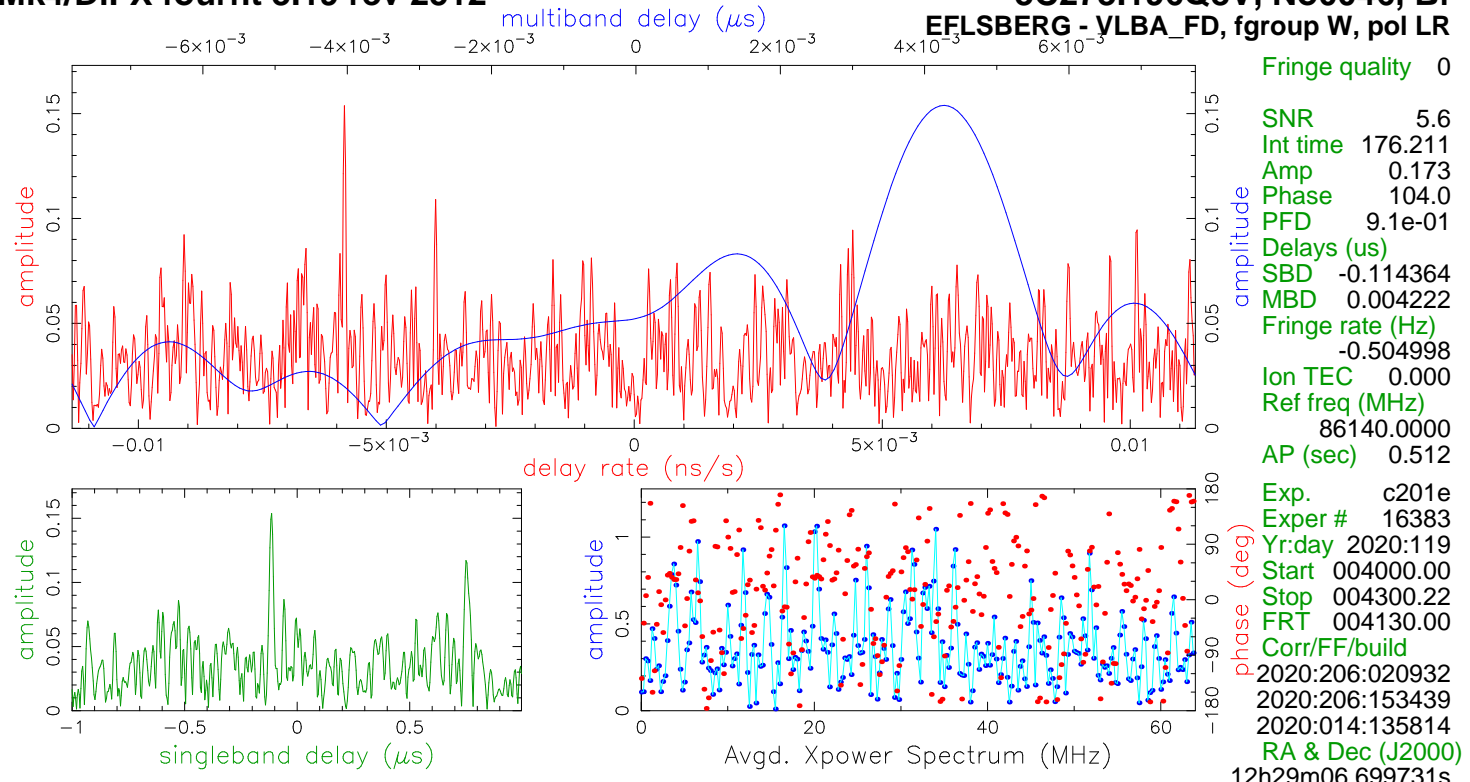


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | 43.9 | 50.3 | 4.1 | 58.6 | -33.0 | 22.5 | -3.1 | 87.4 | Phase | 32.7 |
| | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | Ampl. | 0.5 |
| | 255.9 | 256.0 | 256.4 | 256.8 | 257.3 | 257.1 | 257.3 | 257.3 | Sbd box | 256.3 |
| 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 | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:f | 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 | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.73796725318E+03 | | Apriori delay (usec) | | 1.73796285765E+03 | | Resid mbdelay (usec) | | 4.39553E-03 | +/- 7.4E-05 |
| Sband delay (usec) | 1.73796015465E+03 | | Apriori clock (usec) | | 9.0984631E+00 | | Resid sbdelay (usec) | | -2.70300E-03 | +/- 5.8E-04 |
| Phase delay (usec) | 1.73796285870E+03 | | Apriori clockrate (us/s) | | -3.0900000E-07 | | Resid phdelay (usec) | | 1.05554E-06 | +/- 2.5E-07 |
| Delay rate (us/s) | -1.91967150057E+00 | | Apriori rate (us/s) | | -1.91967161143E+00 | | Resid rate (us/s) | | 1.10861E-07 | +/- 2.4E-09 |
| Total phase (deg) | 233.6 | | Apriori accel (us/s/s) | | -8.19082693796E-06 | | Resid phase (deg) | | 32.7 | +/- 7.8 |

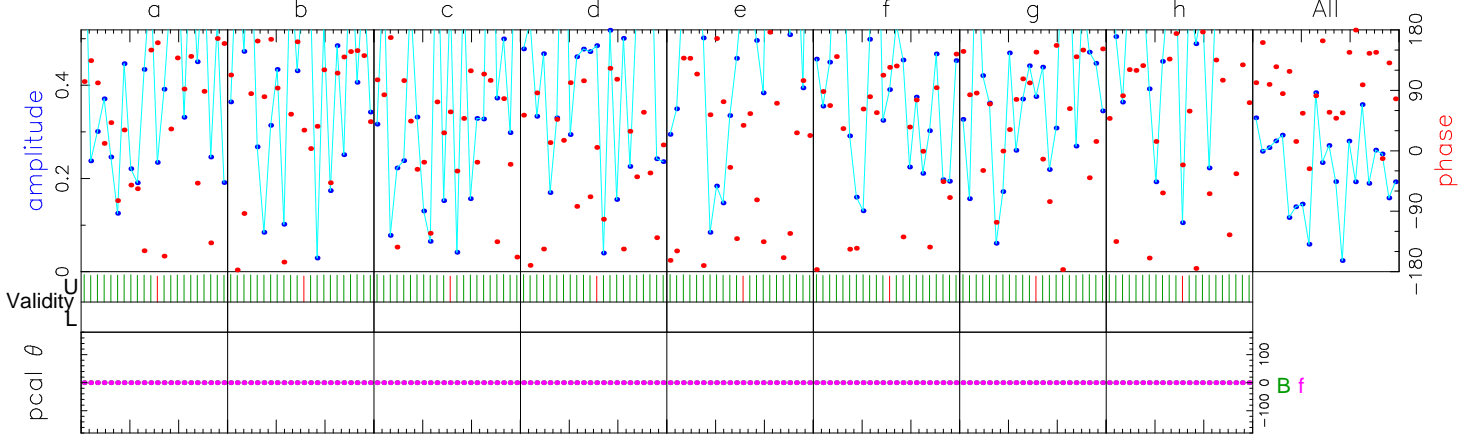
| | RMS | Theor. | Amplitude | 0.407 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|-------------------------------|
| ph/seg (deg) | 48.6 | 18.2 | Search (1024X32) | 0.402 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 46.4 | 31.8 | Interp. | 0.000 | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 42.0 | 11.0 | Inc. seg. avg. | 0.541 | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 24.6 | 19.2 | Inc. frq. avg. | 0.477 | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bf
EFLSBERG - VLBA_FD, fgroup W, pol LR



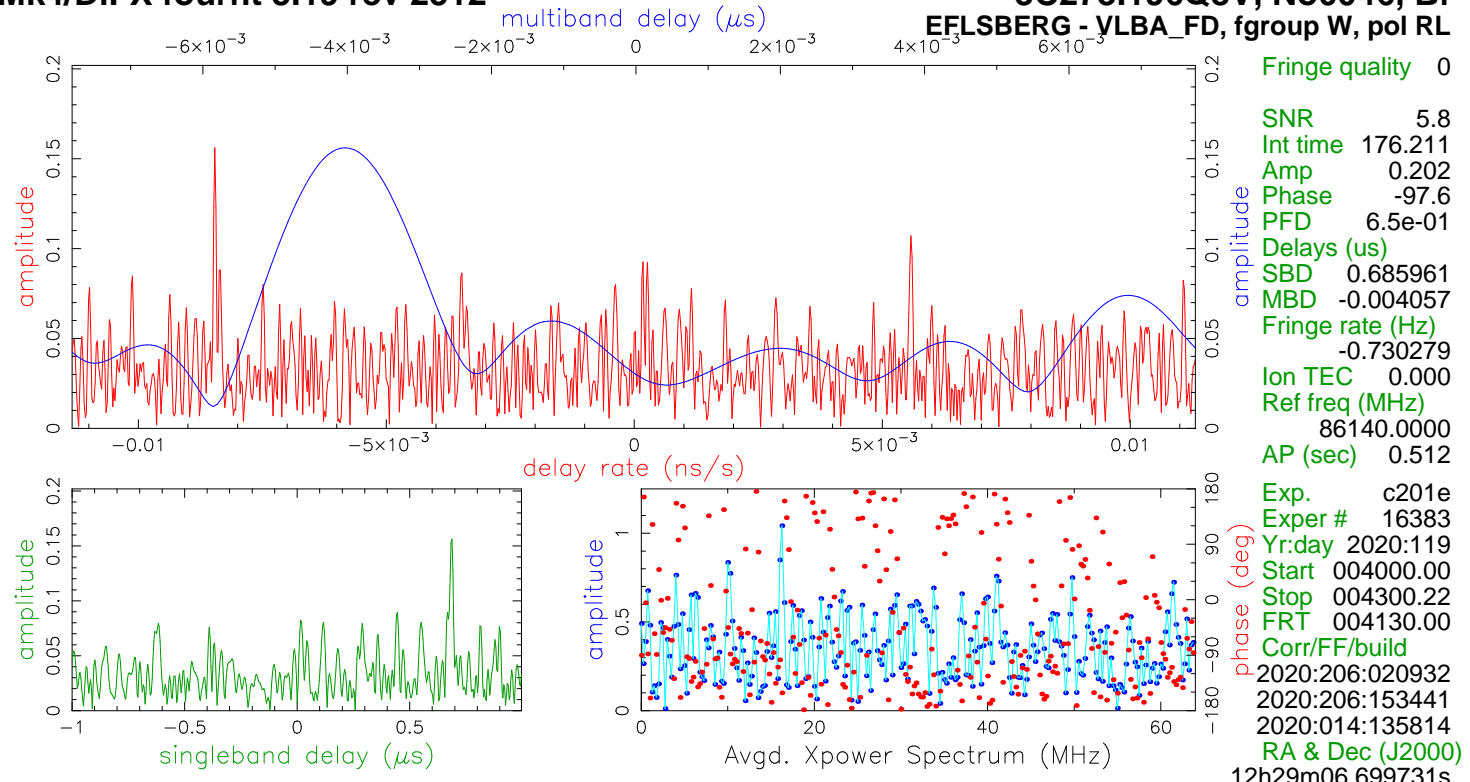
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



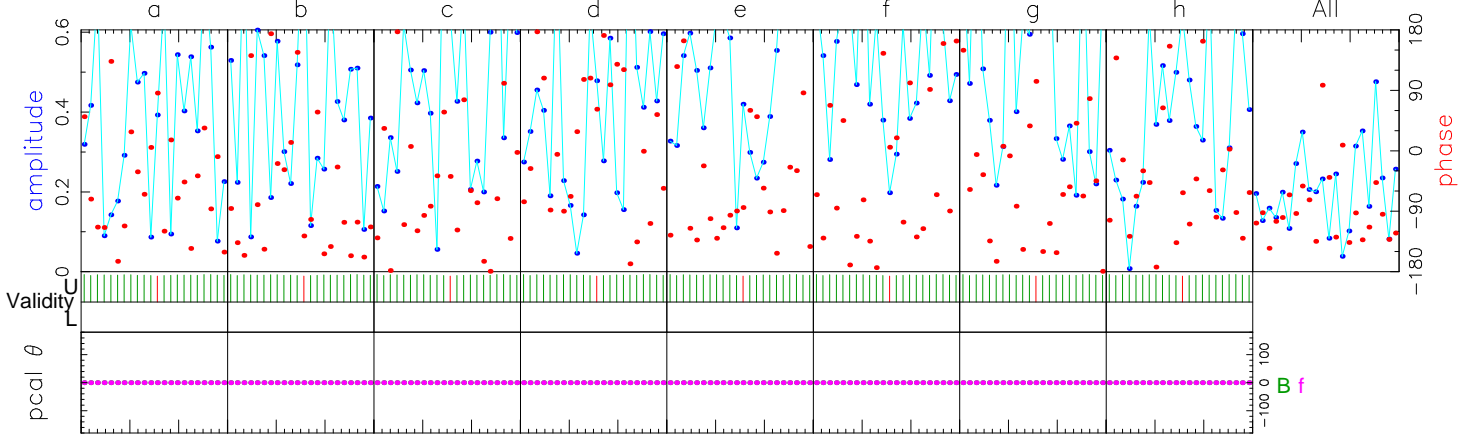
| | | | | | | | | | |
|-------------------------|--------------------|----------|--------------------------|--------------------|----------|----------------------|--------------|------------|---------|
| 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
| 119.2 | 115.9 | 79.5 | 16.7 | 131.6 | 101.3 | 91.1 | 127.8 | Phase | 104.0 |
| 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | Ampl. | 0.2 |
| 51.3 | 41.2 | 226.0 | 287.6 | 318.6 | 8.3 | 301.4 | 449.2 | Sbd box | 227.7 |
| 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 | |
| f 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:f 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:f 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 | |
| f 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| f W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | Chan ids | |
| | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.73784207987E+03 | | Apriori delay (usec) | 1.73796285765E+03 | | Resid mbdelay (usec) | 4.22222E-03 | +/- | 1.9E-04 |
| Sband delay (usec) | 1.73784849340E+03 | | Apriori clock (usec) | 9.0984631E+00 | | Resid sbdelay (usec) | -1.14364E-01 | +/- | 1.5E-03 |
| Phase delay (usec) | 1.73796286100E+03 | | Apriori clockrate (us/s) | -3.0900000E-07 | | Resid phdelay (usec) | 3.35418E-06 | +/- | 6.6E-07 |
| Delay rate (us/s) | -1.91967747396E+00 | | Apriori rate (us/s) | -1.91967161143E+00 | | Resid rate (us/s) | -5.86253E-06 | +/- | 6.3E-09 |
| Total phase (deg) | | 304.9 | Apriori accel (us/s/s) | -8.19082693796E-06 | | Resid phase (deg) | 104.0 | +/- | 20.4 |

| | | | | | | | | | |
|--------------|------|------|------------------|-------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 56.1 | 47.9 | Search (1024X32) | 0.150 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
| amp/seg (%) | 72.2 | 83.6 | Interp. | 0.000 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 41.0 | 28.9 | Inc. seg. avg. | 0.184 | Bits/sample: 2x2 | Sample rate(MISamp/s): 128 | dr window (ns/s) | -0.011 | 0.011 |
| amp/frq (%) | 28.0 | 50.4 | Inc. frq. avg. | 0.174 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) | 0.00 | 0.00 |

B: az 234.2 el 28.0 pa 31.1 f: az 101.6 el 22.3 pa -57.5 u,v (fr/asec) 10996.925 2295.988 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bf..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bf.W.50.196Q8V



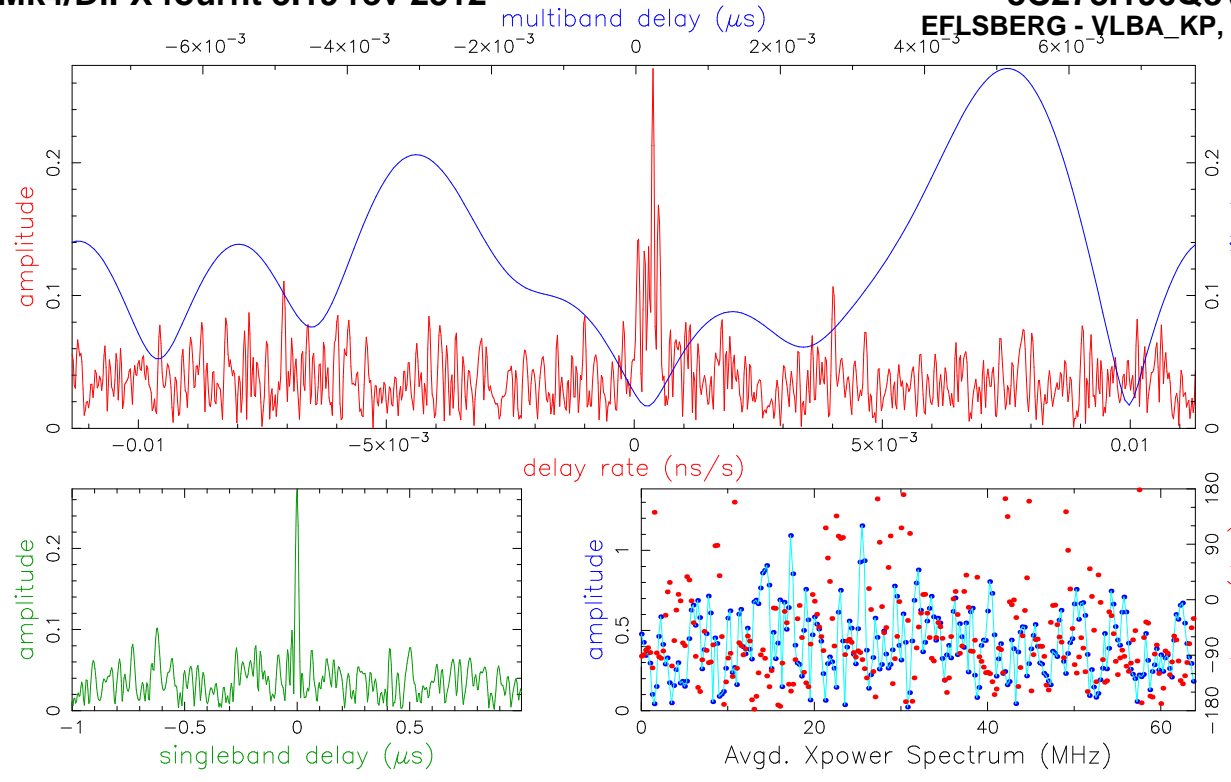
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -65.1 | -120.4 | -85.4 | 167.4 | -103.5 | -119.1 | -72.1 | -83.9 | Phase | -97.6 |
| | 0.2 | 0.3 | 0.2 | 0.0 | 0.3 | 0.3 | 0.2 | 0.2 | Ampl. | 0.2 |
| | 259.2 | 508.5 | 184.1 | 136.0 | 287.0 | 93.7 | 502.1 | 273.1 | Sbd box | 432.6 |
| 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 | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:f | 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 | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.73864630048E+03 | | Apriori delay (usec) | | 1.73796285765E+03 | | Resid mbdelay (usec) | | -4.05717E-03 | +/- 1.9E-04 |
| Sband delay (usec) | 1.73864881915E+03 | | Apriori clock (usec) | | 9.0984631E+00 | | Resid sbdelay (usec) | | 6.85961E-01 | +/- 1.5E-03 |
| Phase delay (usec) | 1.73796285450E+03 | | Apriori clockrate (us/s) | | -3.0900000E-07 | | Resid phdelay (usec) | | -3.14657E-06 | +/- 6.4E-07 |
| Delay rate (us/s) | -1.91968008925E+00 | | Apriori rate (us/s) | | -1.91967161143E+00 | | Resid rate (us/s) | | -8.47782E-06 | +/- 6.2E-09 |
| Total phase (deg) | 103.3 | | Apriori accel (us/s/s) | | -8.19082693796E-06 | | Resid phase (deg) | | -97.6 | +/- 19.9 |

| | RMS | Theor. | Amplitude | 0.202 +/- 0.035 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 50.9 | 46.7 | Search (1024X32) | 0.152 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 71.5 | 81.5 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 44.9 | 28.1 | Inc. seg. avg. | 0.198 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 44.0 | 49.1 | Inc. frq. avg. | 0.192 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

B: az 234.2 el 28.0 pa 31.1 f: az 101.6 el 22.3 pa -57.5 u,v (fr/asec) 10996.925 2295.988 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bf..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bf.W.62.196Q8V

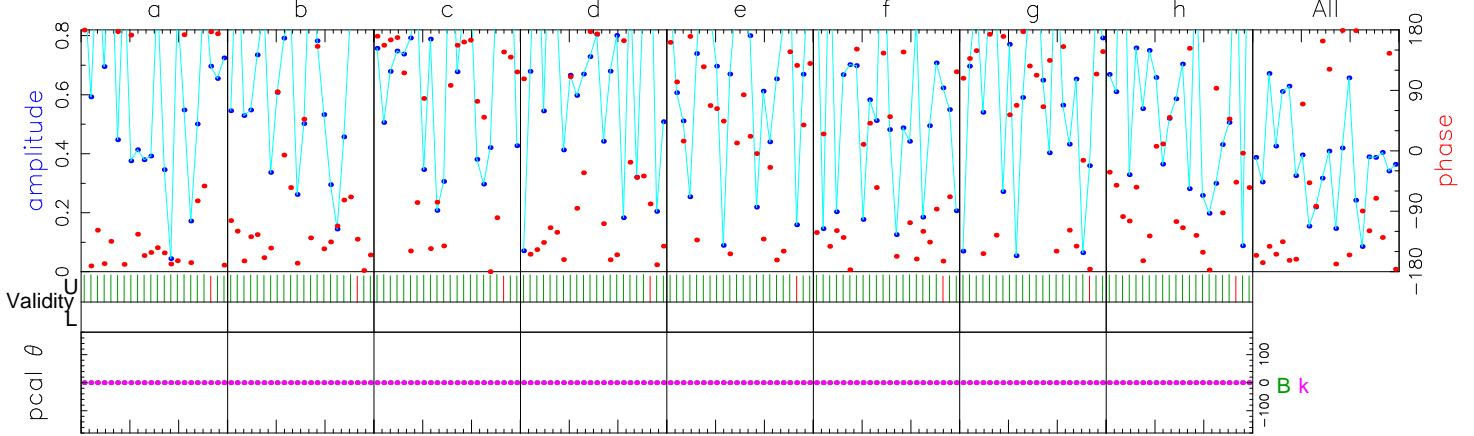


Fringe quality 9

SNR 9.9
Int time 175.850
Amp 0.273
Phase -157.4
PFD 8.1e-15
Delays (us)
SBD -0.001103
MBD 0.005119
Fringe rate (Hz)
0.032259
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153434
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

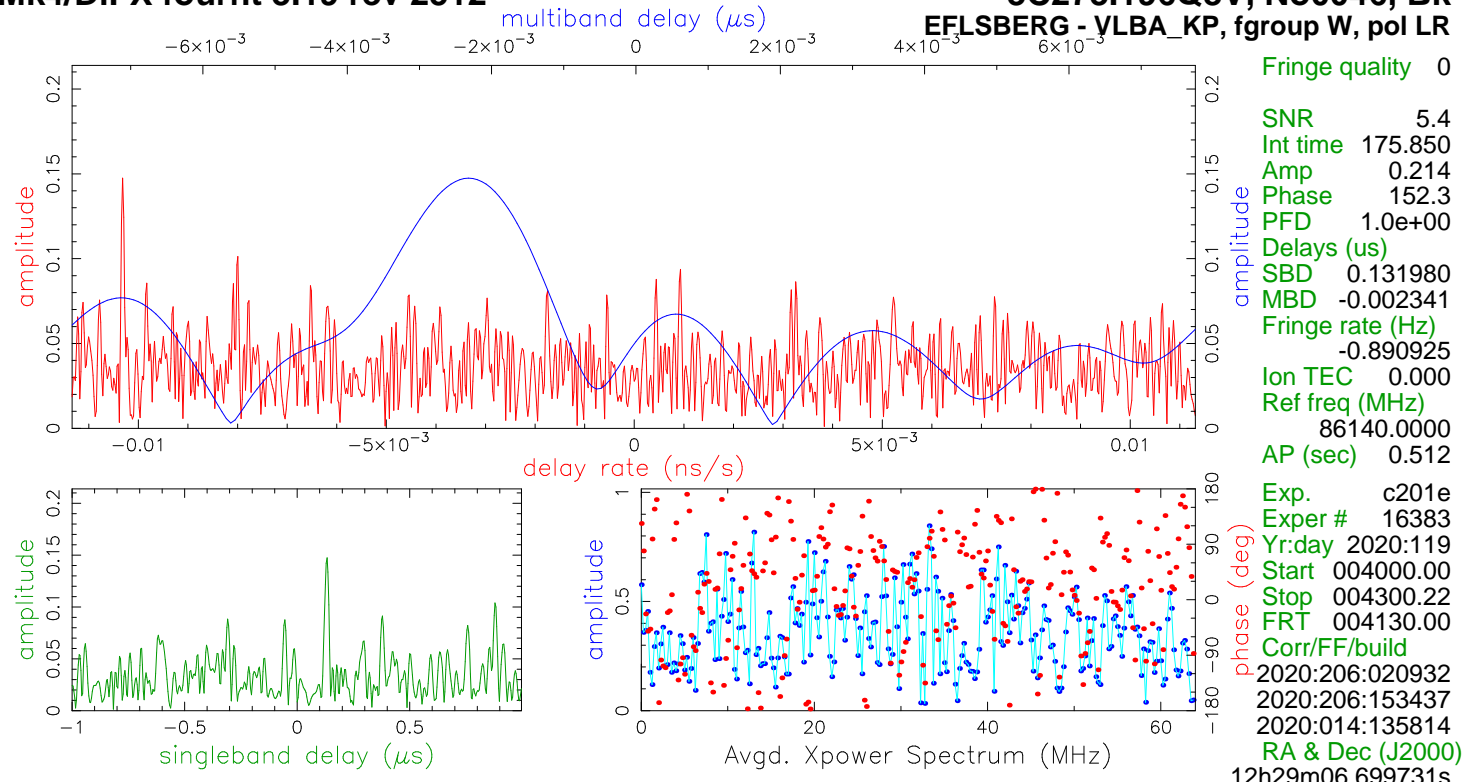


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -153.9 | -130.4 | 162.2 | -123.7 | 116.8 | -150.5 | 156.1 | -76.3 | Phase | -157.4 |
| | 0.5 | 0.4 | 0.4 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | Ampl. | 0.4 |
| | 255.9 | 257.6 | 257.4 | 256.7 | 128.8 | 387.1 | 257.1 | 57.9 | Sbd box | 256.7 |
| 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 | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:k | 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 | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 4.08357359926E+03 | | Apriori delay (usec) | | 4.08356848023E+03 | | Resid mbdelay (usec) | | 5.11903E-03 | +/- 1.1E-04 |
| Sband delay (usec) | 4.08356737698E+03 | | Apriori clock (usec) | | 1.3359812E+01 | | Resid sbdelay (usec) | | -1.10325E-03 | +/- 8.7E-04 |
| Phase delay (usec) | 4.08356847516E+03 | | Apriori clockrate (us/s) | | -2.0540000E-07 | | Resid phdelay (usec) | | -5.07443E-06 | +/- 3.7E-07 |
| Delay rate (us/s) | -1.96758800465E+00 | | Apriori rate (us/s) | | -1.96758837914E+00 | | Resid rate (us/s) | | 3.74490E-07 | +/- 3.6E-09 |
| Total phase (deg) | 162.0 | | Apriori accel (us/s/s) | | -2.07148949252E-05 | | Resid phase (deg) | | -157.4 | +/- 11.6 |

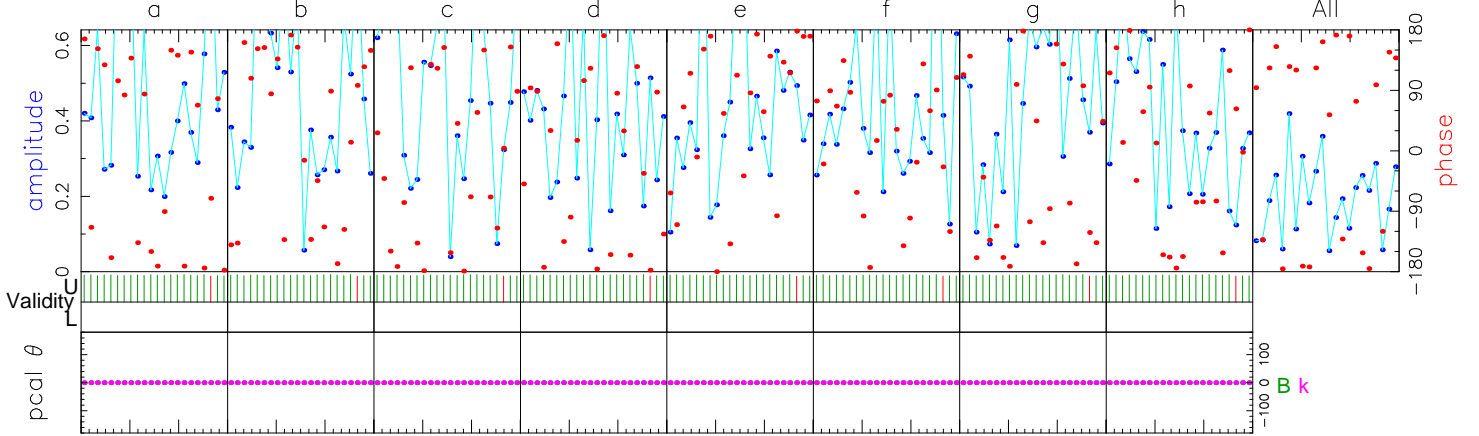
ph/seg (deg) 53.9 27.1 Search (1024X32) 0.264 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.4 47.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.2 16.4 Inc. seg. avg. 0.339 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.9 28.5 Inc. frq. avg. 0.363 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 234.2 el 28.0 pa 31.1 k: az 97.7 el 15.7 pa -57.3 u,v (fr/asec) 11265.034 2087.936 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bk
EFLSBERG - VLBA_KP, fgroup W, pol LR



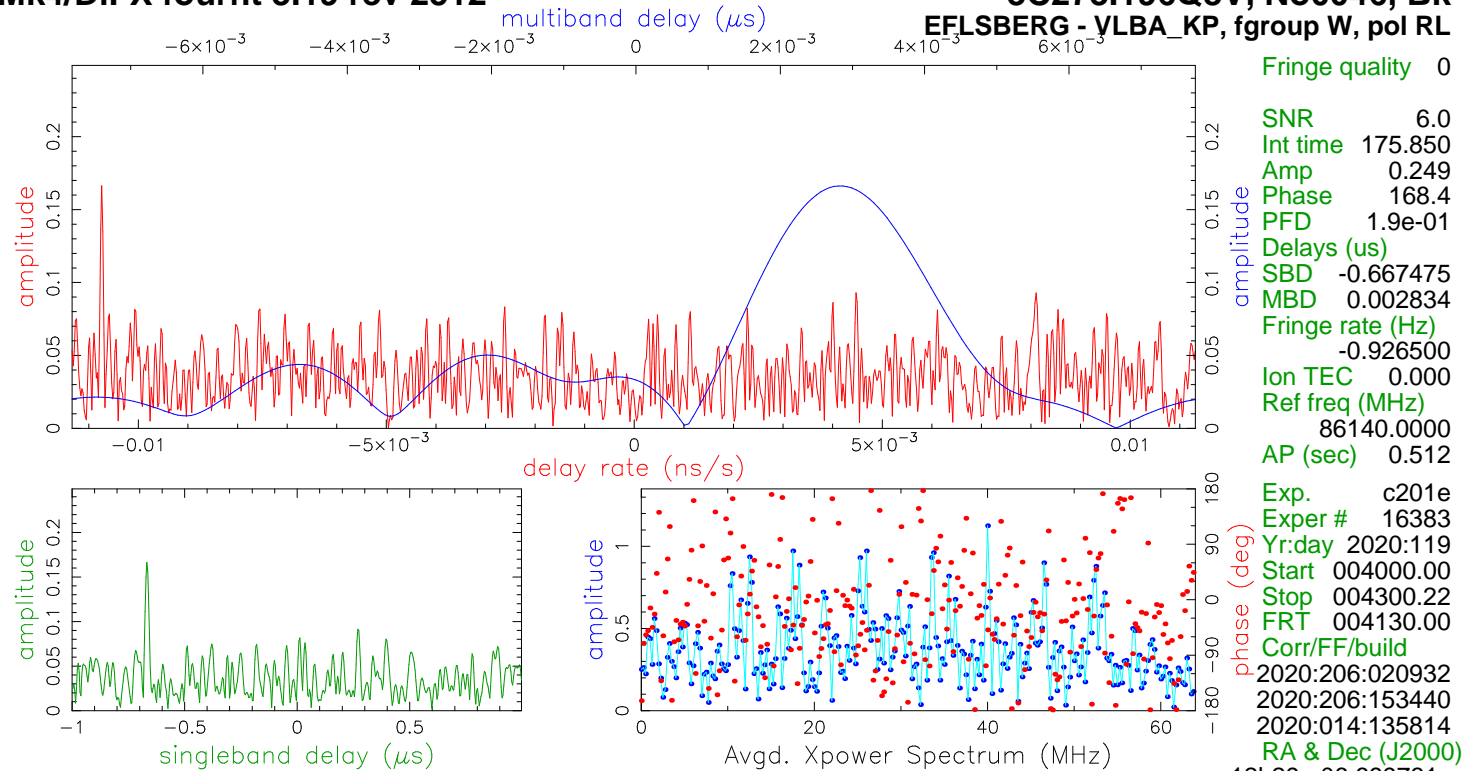
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



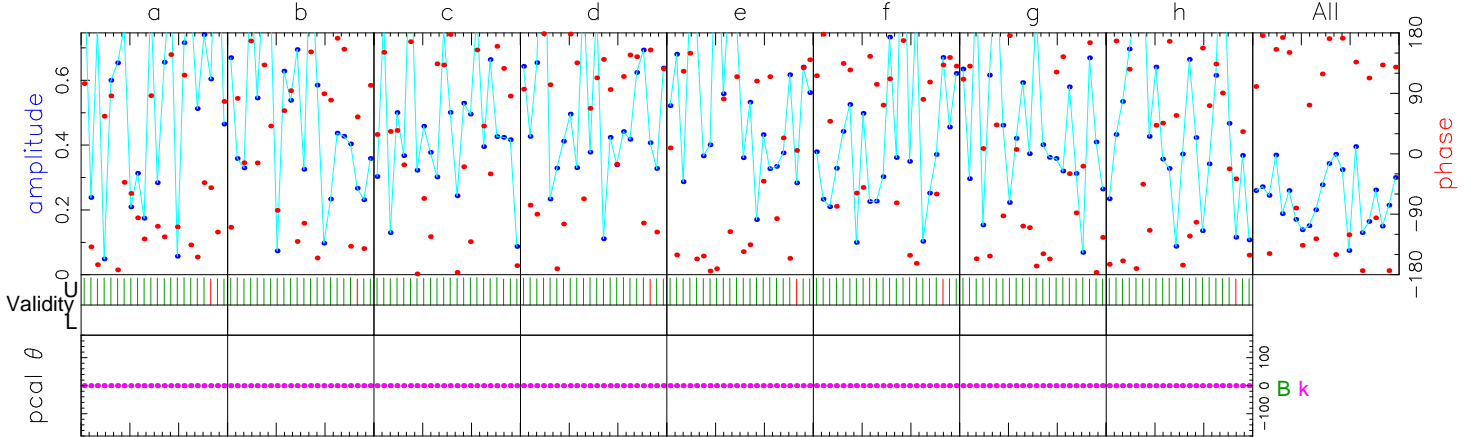
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | 152.2 | 158.6 | 145.8 | 166.2 | 145.1 | 66.2 | -163.4 | 163.8 | Phase | 152.3 |
| | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | Ampl. | 0.2 |
| | 376.4 | 240.2 | 262.1 | 505.1 | 130.5 | 278.3 | 419.6 | 143.2 | Sbd box | 290.8 |
| 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 | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:k | 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 | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 4.08370676404E+03 | | Apriori delay (usec) | | 4.08356848023E+03 | | Resid mbdelay (usec) | | -2.34119E-03 | +/- 2.0E-04 |
| Sband delay (usec) | 4.08370046073E+03 | | Apriori clock (usec) | | 1.3359812E+01 | | Resid sbdelay (usec) | | 1.31980E-01 | +/- 1.6E-03 |
| Phase delay (usec) | 4.08356848514E+03 | | Apriori clockrate (us/s) | | -2.0540000E-07 | | Resid phdelay (usec) | | 4.91180E-06 | +/- 6.9E-07 |
| Delay rate (us/s) | -1.96759872190E+00 | | Apriori rate (us/s) | | -1.96758837914E+00 | | Resid rate (us/s) | | -1.03428E-05 | +/- 6.6E-09 |
| Total phase (deg) | 111.7 | | Apriori accel (us/s/s) | | -2.07148949252E-05 | | Resid phase (deg) | | 152.3 | +/- 21.4 |

| | RMS | Theor. | Amplitude | 0.214 +/- 0.040 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|-----------------------|------------------|--------|-------|
| ph/seg (deg) | 49.5 | 50.1 | Search (1024X32) | 0.146 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 74.7 | 87.5 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 40.5 | 30.2 | Inc. seg. avg. | 0.205 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 42.8 | 52.8 | Inc. frq. avg. | 0.225 | Data rate(Mb/s): 2048 | nlags: 256 | | | |

B: az 234.2 el 28.0 pa 31.1 k: az 97.7 el 15.7 pa -57.3 u,v (fr/asec) 11265.034 2087.936 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bk..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bk.W.41.196Q8V



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

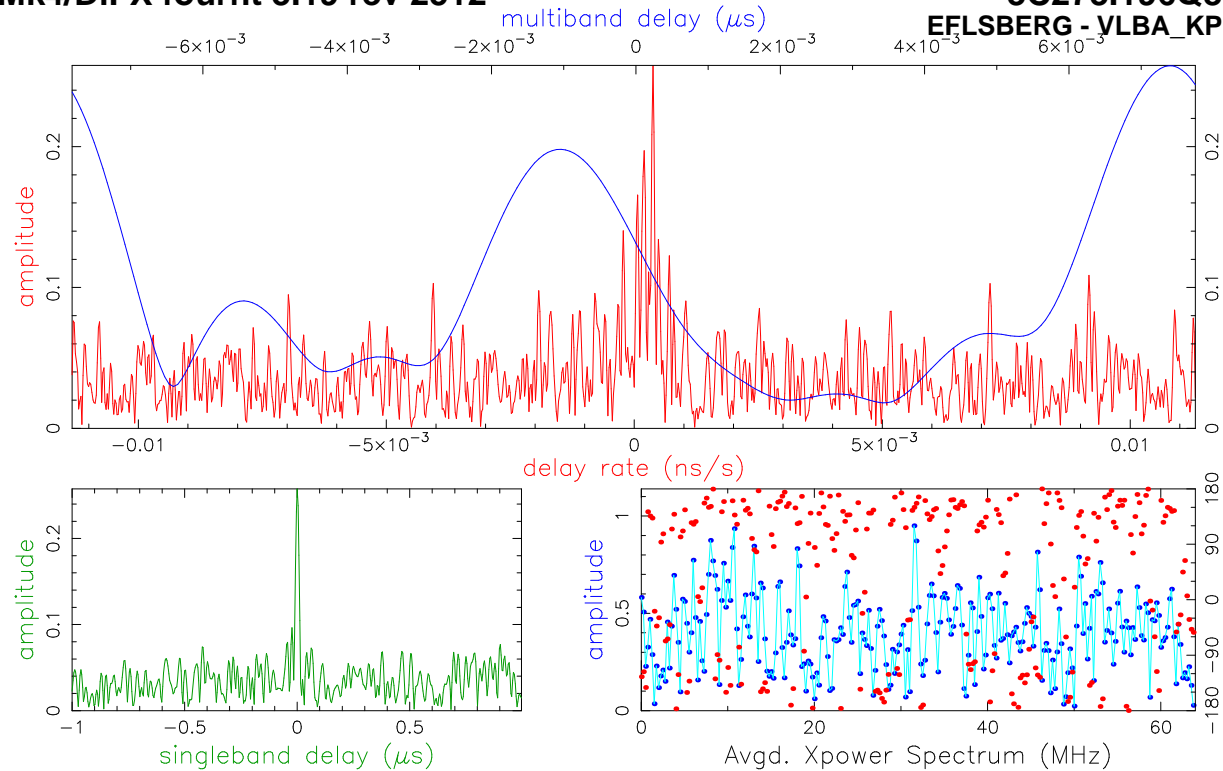


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -159.3 | 146.9 | 149.0 | 165.7 | 177.9 | 149.0 | -161.7 | 156.5 | Phase | 168.4 |
| | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.1 | Ampl. | 0.2 |
| | 495.7 | 481.5 | 282.1 | 261.0 | 277.1 | 264.7 | 266.8 | 73.3 | Sbd box | 86.1 |
| 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 | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:k | 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 | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 4.08289943969E+03 | | Apriori delay (usec) | | 4.08356848023E+03 | | Resid mbdelay (usec) | | 2.83446E-03 | +/- 1.8E-04 |
| Sband delay (usec) | 4.08290100498E+03 | | Apriori clock (usec) | | 1.3359812E+01 | | Resid sbdelay (usec) | | -6.67475E-01 | +/- 1.4E-03 |
| Phase delay (usec) | 4.08356848566E+03 | | Apriori clockrate (us/s) | | -2.0540000E-07 | | Resid phdelay (usec) | | 5.43003E-06 | +/- 6.1E-07 |
| Delay rate (us/s) | -1.96759913488E+00 | | Apriori rate (us/s) | | -1.96758837914E+00 | | Resid rate (us/s) | | -1.07557E-05 | +/- 5.9E-09 |
| Total phase (deg) | 127.7 | | Apriori accel (us/s/s) | | -2.07148949252E-05 | | Resid phase (deg) | | 168.4 | +/- 19.0 |

| | RMS | Theor. | Amplitude | 0.249 +/- 0.041 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 53.2 | 44.5 | Search (1024X32) | 0.162 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 68.0 | 77.7 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 23.8 | 26.8 | Inc. seg. avg. | 0.275 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 27.7 | 46.9 | Inc. frq. avg. | 0.239 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

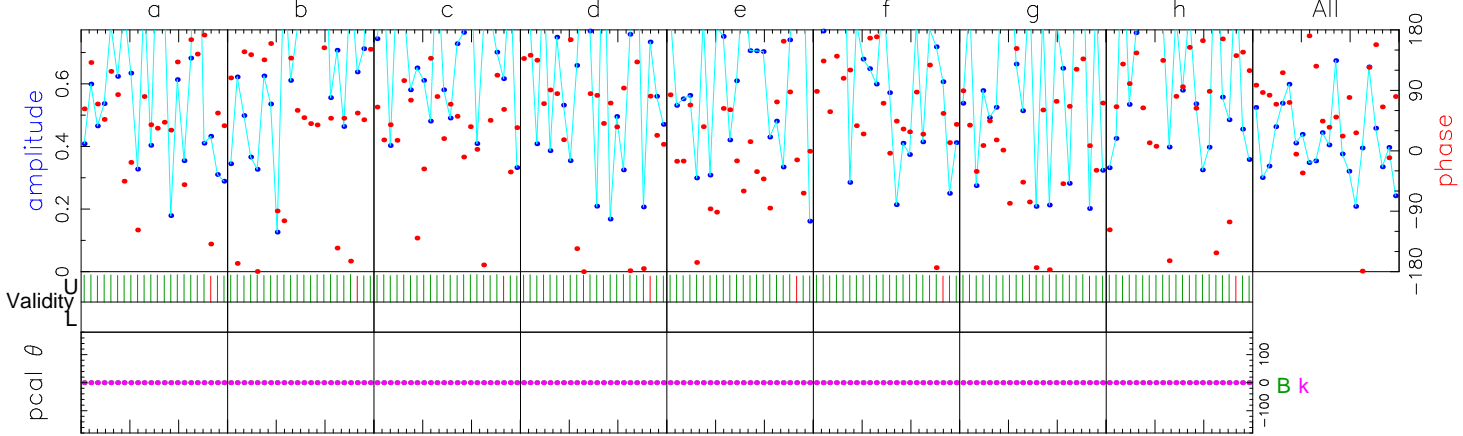
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bk
EFLSBERG - VLBA_KP, fgroup W, pol LL



Fringe quality 9
SNR 9.3
Int time 175.850
Amp 0.258
Phase 76.0
PFD 1.9e-12
Delays (us)
SBD 0.000281
MBD 0.007408
Fringe rate (Hz) 0.032669
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build 2020:206:020932
2020:206:153432
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

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

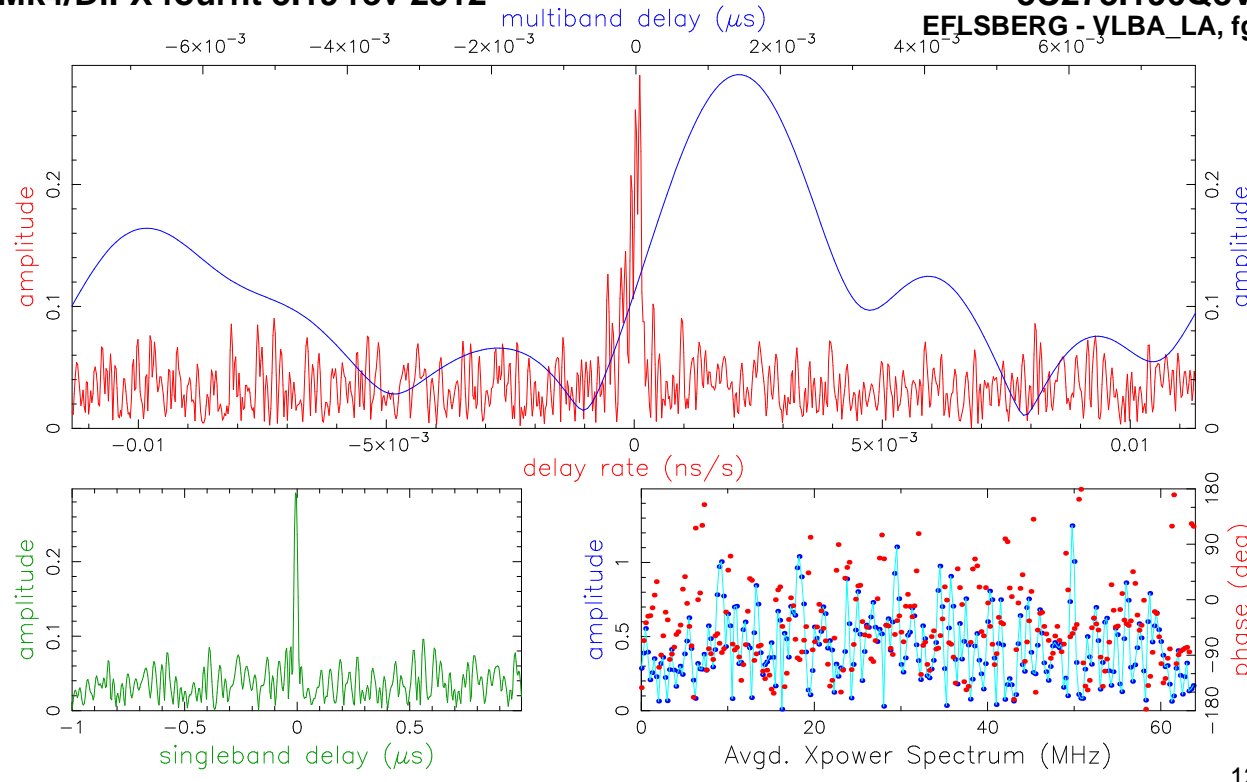


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |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

| | | | | | | | | | | |
|-------------------------|--------------------|--------------------------|------------------------|--------------------|----------------------|-------------------|-------------|------|---------|------|
| Group delay (usec)(sbd) | 4.08357588811E+03 | Apriori delay (usec) | | 4.08356848023E+03 | Resid mbdelay (usec) | | 7.40788E-03 | +/- | 1.2E-04 | |
| Sband delay (usec) | 4.08356876148E+03 | Apriori clock (usec) | | 1.3359812E+01 | Resid sbdelay (usec) | | 2.81250E-04 | +/- | 9.2E-04 | |
| Phase delay (usec) | 4.08356848268E+03 | Apriori clockrate (us/s) | | -2.0540000E-07 | Resid phdelay (usec) | | 2.45005E-06 | +/- | 4.0E-07 | |
| Delay rate (us/s) | -1.96758799988E+00 | Apriori rate (us/s) | | -1.96758837914E+00 | Resid rate (us/s) | | 3.79254E-07 | +/- | 3.8E-09 | |
| Total phase (deg) | 35.3 | | Apriori accel (us/s/s) | | -2.07148949252E-05 | Resid phase (deg) | | 76.0 | +/- | 12.3 |

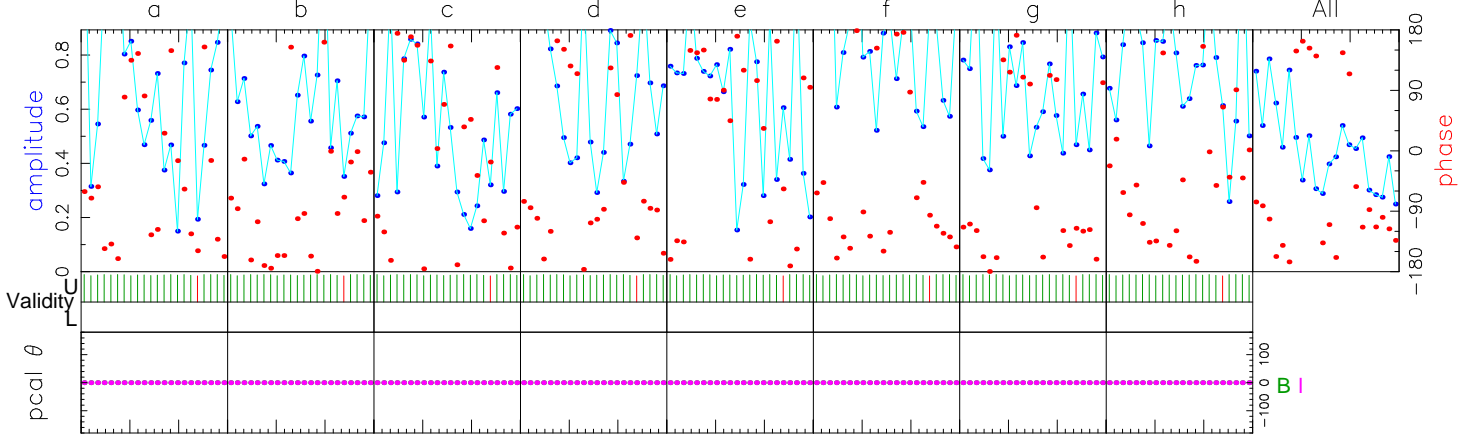
| | | | | | | | | | | | | | |
|--------------|------|------|------------------|-----------------|----------------------------------------|------------|-----------------------|-------------------|------------------|------------------|--------|-------|------|
| ph/seg (deg) | 55.9 | 28.8 | Amplitude | 0.258 +/- 0.028 | Pcal mode: MANUAL, MANUAL | | PC period (AP's) 5, 5 | | | | | | |
| amp/seg (%) | 77.8 | 50.2 | Search (1024X32) | 0.256 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | | -1.000 | 1.000 | | | |
| ph/frq (deg) | 47.2 | 17.4 | Inc. seg. avg. | 0.373 | Bits/sample: 2x2 | | SampCntNorm: enabled | | mb window (us) | | -0.008 | 0.008 | |
| amp/frq (%) | 37.8 | 30.3 | Inc. frq. avg. | 0.313 | Sample rate(MISamp/s): 128 | | Data rate(Mb/s): 2048 | | dr window (ns/s) | | -0.011 | 0.011 | |
| | | | | | | nlags: 256 | | t_cohere infinite | | ion window (TEC) | | 0.00 | 0.00 |

B: az 234.2 el 28.0 pa 31.1 k: az 97.7 el 15.7 pa -57.3 u,v (fr/asec) 11265.034 2087.936 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bk..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bk.W.6.196Q8V



Fringe quality 9
 SNR 10.8
 Int time 177.154
 Amp 0.298
 Phase -139.1
 PFD 5.5e-19
 Delays (us)
 SBD -0.006027
 MBD 0.001357
 Fringe rate (Hz) 0.009504
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153434
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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

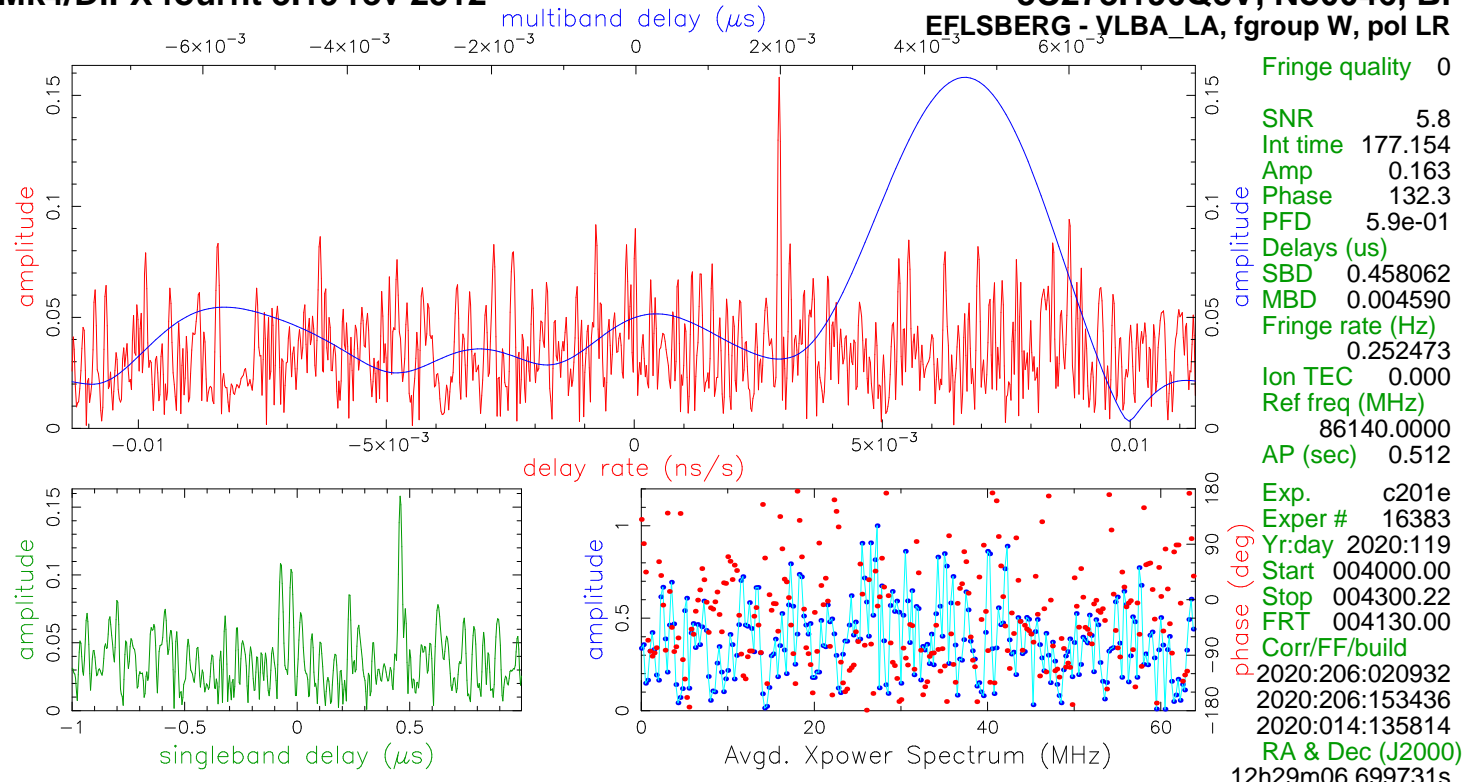


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:I | 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 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| I | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |

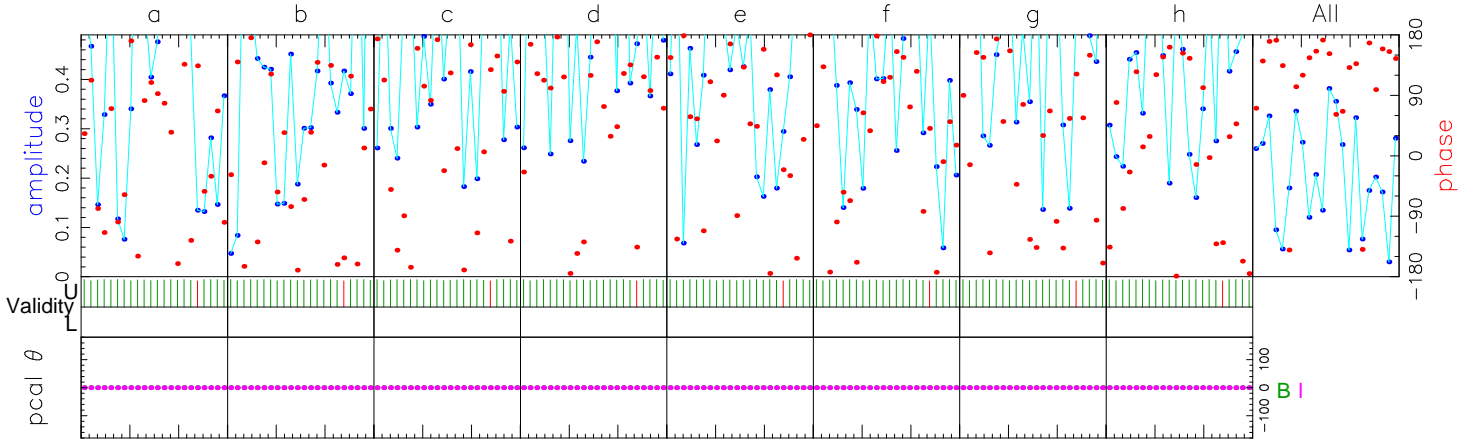
| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 2.76954667023E+03 | Apriori delay (usec) | 2.76954531366E+03 | Resid mbdelay (usec) | 1.35656E-03 | +/- | 1.0E-04 |
| Sband delay (usec) | 2.76953928666E+03 | Apriori clock (usec) | 1.6754118E+01 | Resid sbdelay (usec) | -6.02700E-03 | +/- | 8.0E-04 |
| Phase delay (usec) | 2.76954530918E+03 | Apriori clockrate (us/s) | -4.8999999E-08 | Resid phdelay (usec) | -4.48452E-06 | +/- | 3.4E-07 |
| Delay rate (us/s) | -1.87187984499E+00 | Apriori rate (us/s) | -1.87187995533E+00 | Resid rate (us/s) | 1.10334E-07 | +/- | 3.3E-09 |
| Total phase (deg) | | Apriori accel (us/s/s) | -1.39219030115E-05 | Resid phase (deg) | -139.1 | +/- | 10.6 |

| | | | | | | | | | | | |
|--------------|------|------------------|-------|----------------|-----------------|------------------------|-----------------------------|----------------------|-------------------|------------------|-----------|
| ph/seg (deg) | 52.7 | RMS | 24.8 | Theor. | 0.298 +/- 0.027 | PCal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | | |
| amp/seg (%) | 75.6 | Search (1024X32) | 0.289 | Amplitude | | PCal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 1.000 | | |
| ph/frq (deg) | 44.1 | Interp. | 0.000 | Search | | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 | |
| amp/frq (%) | 37.3 | Inc. seg. avg. | 0.422 | Inc. seg. avg. | | Sample rate (MSamp/s): | 128 | dr window (ns/s) | -0.011 0.011 | | |
| | | Inc. frq. avg. | 0.340 | Inc. frq. avg. | | Data rate (Mb/s): | 2048 | nlags: 256 | t_cohere infinite | ion window (TEC) | 0.00 0.00 |

B: az 234.2 el 28.0 pa 31.1 I: az 102.1 el 19.4 pa -52.5 u,v (fr/asec) 10719.954 1616.496 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BI..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BI.W.21.196Q8V

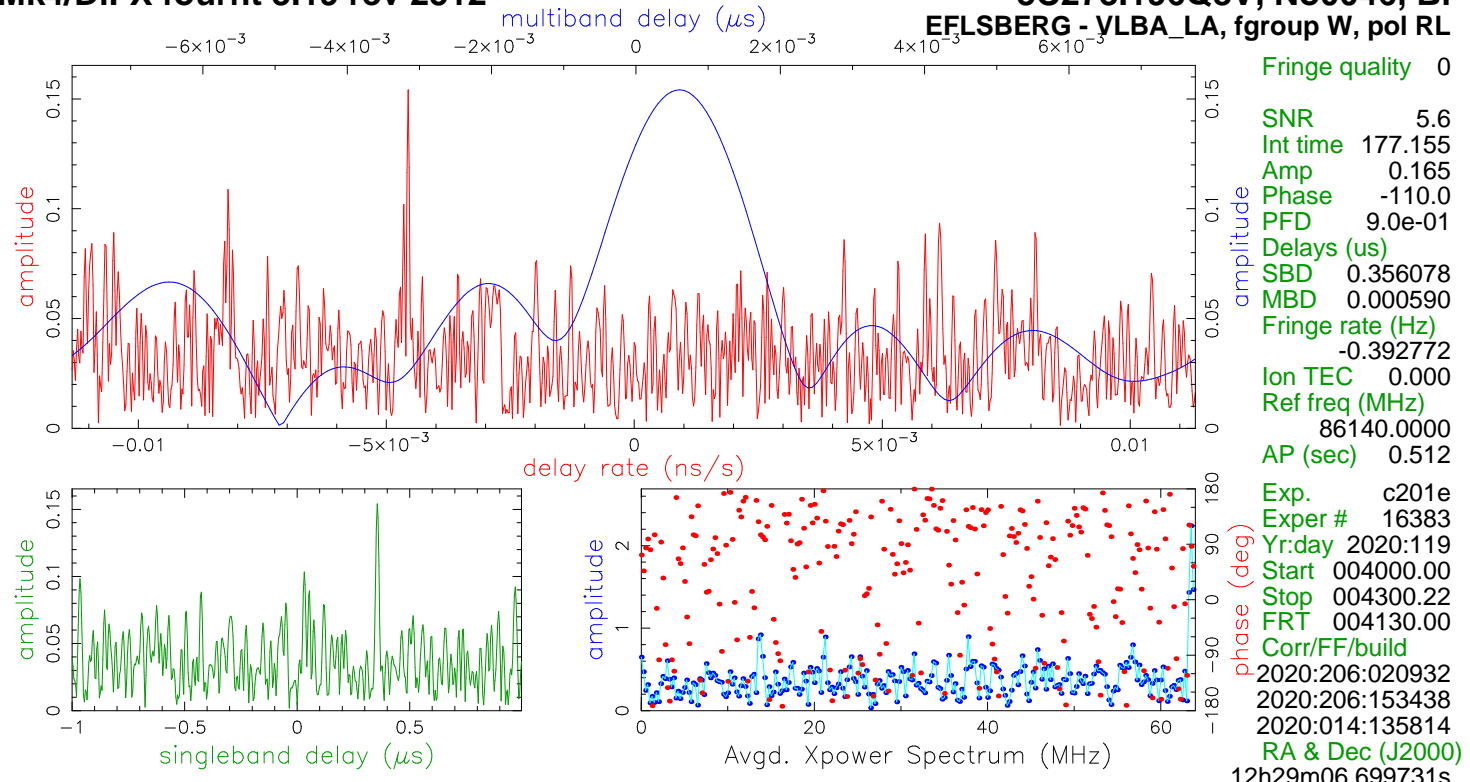


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

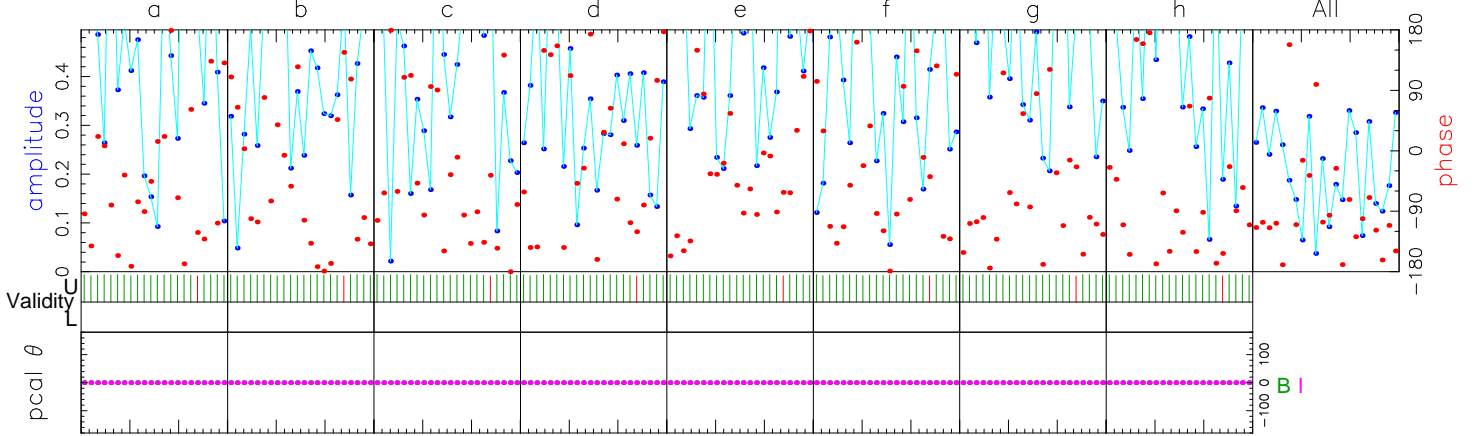


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|--------------------|----------|----------------------|-------------|----------|------------|-------|
| 123.1 | 158.3 | 147.5 | 129.0 | 129.4 | 102.8 | 146.8 | 137.8 | 137.8 | Phase | 132.3 |
| 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | Ampl. | 0.2 |
| 174.3 | 108.9 | 302.6 | 374.3 | 217.7 | 115.1 | 119.0 | 180.8 | 180.8 | Sbd box | 374.3 |
| U/L 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| B 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| I 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:I 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:I 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC | |
| B 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| I 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| I | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 2.77000302847E+03 | | Apriori delay (usec) | 2.76954531366E+03 | | Resid mbdelay (usec) | 4.58980E-03 | +/- | 1.9E-04 | |
| Sband delay (usec) | 2.77000337591E+03 | | Apriori clock (usec) | 1.6754118E+01 | | Resid sbdelay (usec) | 4.58062E-01 | +/- | 1.5E-03 | |
| Phase delay (usec) | 2.76954531793E+03 | | Apriori clockrate (us/s) | -4.8999999E-08 | | Resid phdelay (usec) | 4.26705E-06 | +/- | 6.4E-07 | |
| Delay rate (us/s) | -1.87187702437E+00 | | Apriori rate (us/s) | -1.87187995533E+00 | | Resid rate (us/s) | 2.93096E-06 | +/- | 6.1E-09 | |
| Total phase (deg) | | 247.2 | Apriori accel (us/s/s) | -1.39219030115E-05 | | Resid phase (deg) | 132.3 | +/- | 19.8 | |

| | RMS | Theor. | Amplitude | 0.163 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|-------------------------------|
| ph/seg (deg) | 42.3 | 46.4 | Search (1024X32) | 0.152 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 72.6 | 81.0 | Interp. | 0.000 | SampCntNorm: enabled | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 18.8 | 28.0 | Inc. seg. avg. | 0.161 | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 56.4 | 48.9 | Inc. frq. avg. | 0.150 | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |



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



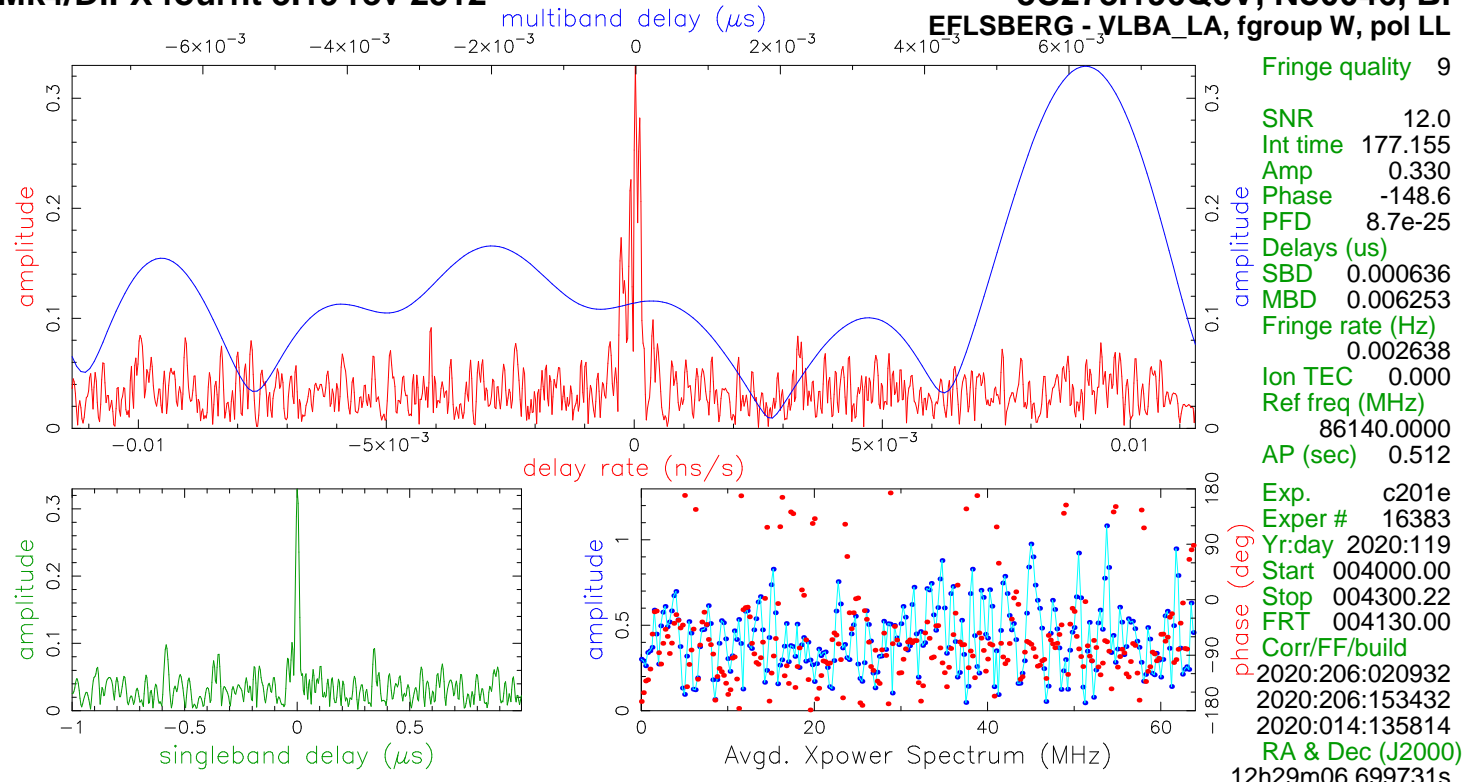
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|--------|
| | -115.0 | -127.1 | -92.8 | -161.7 | -76.4 | -118.1 | -106.6 | -118.9 | Phase | -110.0 |
| | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.3 | 0.2 | Ampl. | 0.2 |
| | 84.7 | 97.3 | 418.8 | 25.9 | 12.0 | 65.4 | 349.0 | 426.2 | Sbd box | 348.2 |
| 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 | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:I | 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 | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| I | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 2.76990527916E+03 | Apriori delay (usec) | 2.76954531366E+03 | Resid mbdelay (usec) | 5.90491E-04 | +/- | 1.9E-04 |
| Sband delay (usec) | 2.76990139141E+03 | Apriori clock (usec) | 1.6754118E+01 | Resid sbdelay (usec) | 3.56078E-01 | +/- | 1.5E-03 |
| Phase delay (usec) | 2.76954531012E+03 | Apriori clockrate (us/s) | -4.8999999E-08 | Resid phdelay (usec) | -3.54580E-06 | +/- | 6.6E-07 |
| Delay rate (us/s) | -1.87188451501E+00 | Apriori rate (us/s) | -1.87187995533E+00 | Resid rate (us/s) | -4.55969E-06 | +/- | 6.3E-09 |
| Total phase (deg) | | Apriori accel (us/s/s) | -1.39219030115E-05 | Resid phase (deg) | -110.0 | +/- | 20.4 |

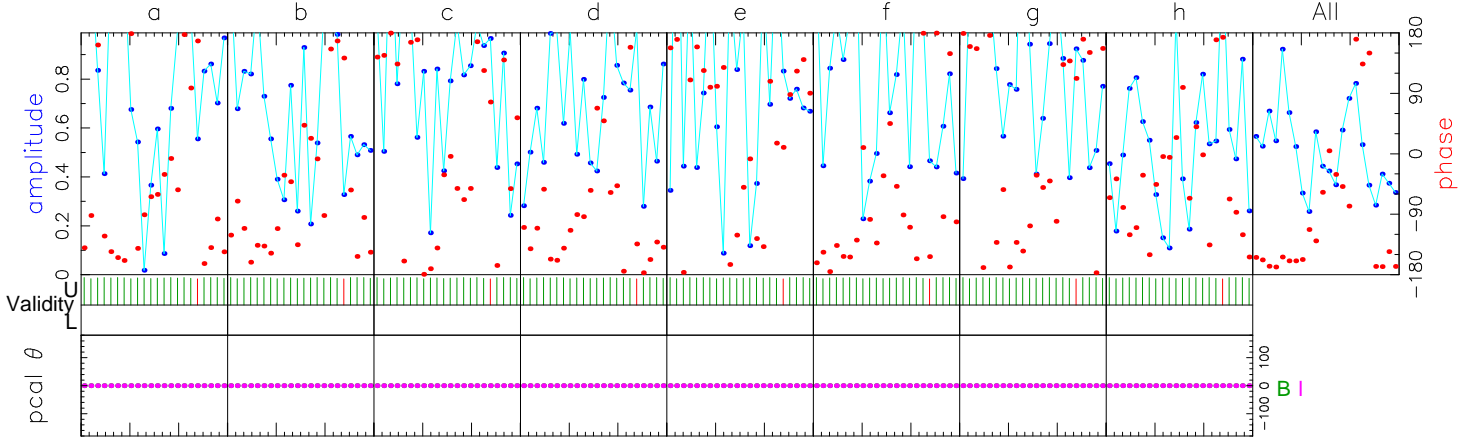
| | | | | | | | |
|--------------|------|------------------|-------|----------------|-----------------|----------------------------------------|-------------------------------|
| ph/seg (deg) | 55.6 | Theor. | 47.8 | Amplitude | 0.165 +/- 0.029 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| amp/seg (%) | 70.6 | Search (1024X32) | 0.153 | Interp. | 0.000 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| ph/frq (deg) | 27.6 | Inc. seg. avg. | 0.166 | Inc. frq. avg. | 0.157 | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| amp/frq (%) | 39.5 | Inc. frq. avg. | 0.157 | | | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| | | | | | | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |

B: az 234.2 el 28.0 pa 31.1 I: az 102.1 el 19.4 pa -52.5 u,v (fr/asec) 10719.954 1616.496 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BI..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BI.W.42.196Q8V



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

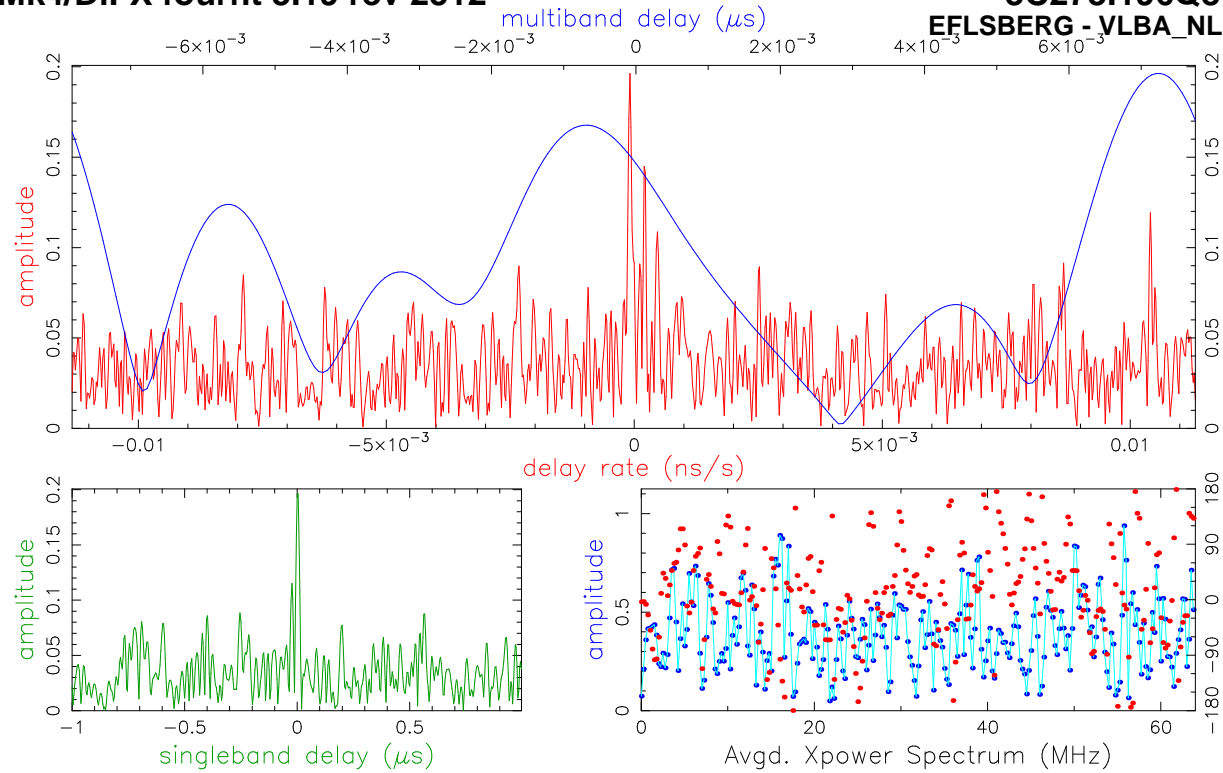


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:I | 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 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | Chan ids |
| I | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | Tracks |

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 2.76955156675E+03 | Apriori delay (usec) | 2.76954531366E+03 | Resid mbdelay (usec) | 6.25308E-03 | +/- | 9.0E-05 |
| Sband delay (usec) | 2.76954594991E+03 | Apriori clock (usec) | 1.6754118E+01 | Resid sbdelay (usec) | 6.36250E-04 | +/- | 7.2E-04 |
| Phase delay (usec) | 2.76954530887E+03 | Apriori clockrate (us/s) | -4.8999999E-08 | Resid phdelay (usec) | -4.79163E-06 | +/- | 3.1E-07 |
| Delay rate (us/s) | -1.87187992470E+00 | Apriori rate (us/s) | -1.87187995533E+00 | Resid rate (us/s) | 3.06267E-08 | +/- | 3.0E-09 |
| Total phase (deg) | | Apriori accel (us/s/s) | -1.39219030115E-05 | Resid phase (deg) | -148.6 | +/- | 9.5 |

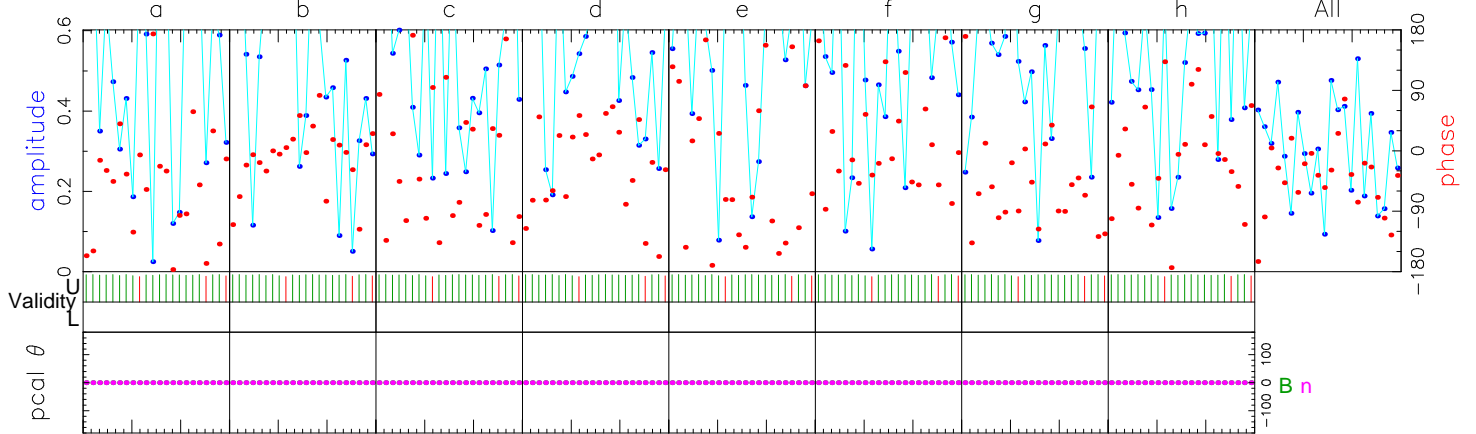
| | | | | | | | | | | |
|--------------|------|--------|------|------------------|-----------------|------------------------|-----------------------------|----------------------|----------------|--------------|
| ph/seg (deg) | 58.7 | Theor. | 22.4 | Amplitude | 0.330 +/- 0.027 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | |
| amp/seg (%) | 74.7 | | 39.1 | Search (1024X32) | 0.316 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 1.000 | |
| ph/frq (deg) | 45.5 | | 13.5 | Interp. | 0.000 | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| amp/frq (%) | 37.4 | | 23.6 | Inc. seg. avg. | 0.475 | Sample rate (MSamp/s): | 128 | dr window (ns/s) | -0.011 0.011 | |
| | | | | Inc. frq. avg. | 0.385 | Data rate (Mb/s): | 2048 | ion window (TEC) | 0.00 0.00 | |

B: az 234.2 el 28.0 pa 31.1 I: az 102.1 el 19.4 pa -52.5 u,v (fr/asec) 10719.954 1616.496 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BI..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BI.W.8.196Q8V



Fringe quality 9
SNR 7.3
Int time 176.369
Amp 0.201
Phase -39.8
PFD 4.8e-05
Delays (us)
SBD 0.001974
MBD 0.007206
Fringe rate (Hz)
-0.006711
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153433
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

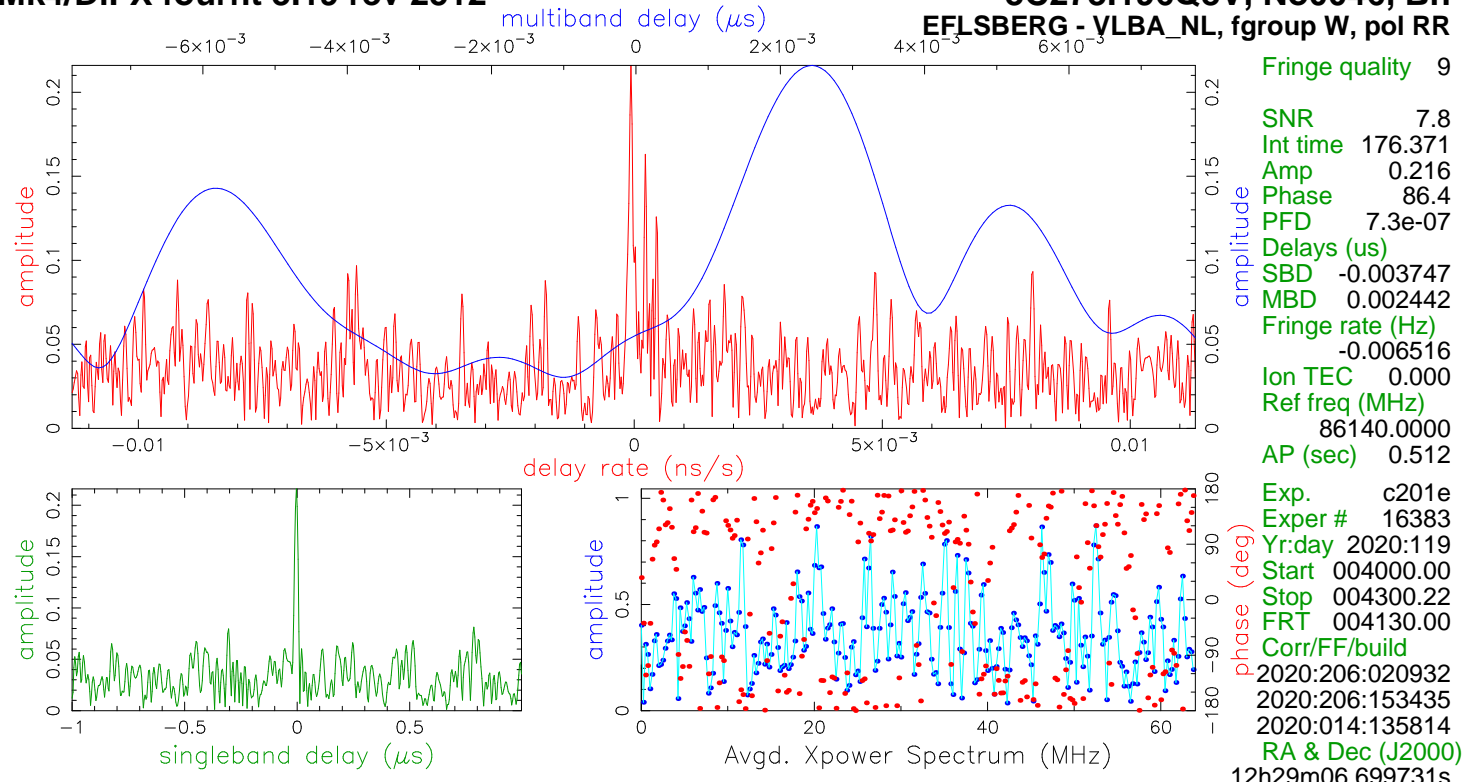
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -51.9 | -7.3 | -109.7 | -1.6 | -141.4 | -19.4 | -62.1 | 5.6 | Phase | -39.8 |
| | 0.3 | 0.4 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | 0.2 | Ampl. | 0.3 |
| | 197.6 | 256.5 | 150.8 | 257.5 | 164.8 | 257.0 | 258.3 | 258.8 | Sbd box | 257.5 |
| 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 | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -2.78372610533E+02 | | Apriori delay (usec) | | -2.78379816303E+02 | | Resid mbdelay (usec) | | 7.20577E-03 | +/- 1.5E-04 |
| Sband delay (usec) | -2.78377842303E+02 | | Apriori clock (usec) | | -1.9315279E+01 | | Resid sbdelay (usec) | | 1.97400E-03 | +/- 1.2E-03 |
| Phase delay (usec) | -2.78379817587E+02 | | Apriori clockrate (us/s) | | -5.3399998E-07 | | Resid phdelay (usec) | | -1.28341E-06 | +/- 5.1E-07 |
| Delay rate (us/s) | -1.62878379694E+00 | | Apriori rate (us/s) | | -1.62878371903E+00 | | Resid rate (us/s) | | -7.79116E-08 | +/- 4.9E-09 |
| Total phase (deg) | -175.3 | | Apriori accel (us/s/s) | | 1.78196318208E-06 | | Resid phase (deg) | | -39.8 | +/- 15.7 |

| | RMS | Theor. | Amplitude | 0.201 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 52.1 | 36.9 | Search (1024X32) | 0.191 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 80.7 | 64.3 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 59.0 | 22.2 | Inc. seg. avg. | 0.257 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 49.5 | 38.8 | Inc. frq. avg. | 0.263 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

B: az 234.2 el 28.0 pa 31.1 n: az 115.5 el 28.3 pa -42.4 u,v (fr/asec) 9334.780 938.173 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bn..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bn.W.13.196Q8V



Fringe quality 9

SNR 7.8

Int time 176.371

Amp 0.216

Phase 86.4

PFD 7.3e-07

Delays (us)

SBD -0.003747

MBD 0.002442

Fringe rate (Hz)

-0.006516

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 004000.00

Stop 004300.22

FRT 004130.00

Corr/FF/build

2020:206:020932

2020:206:153435

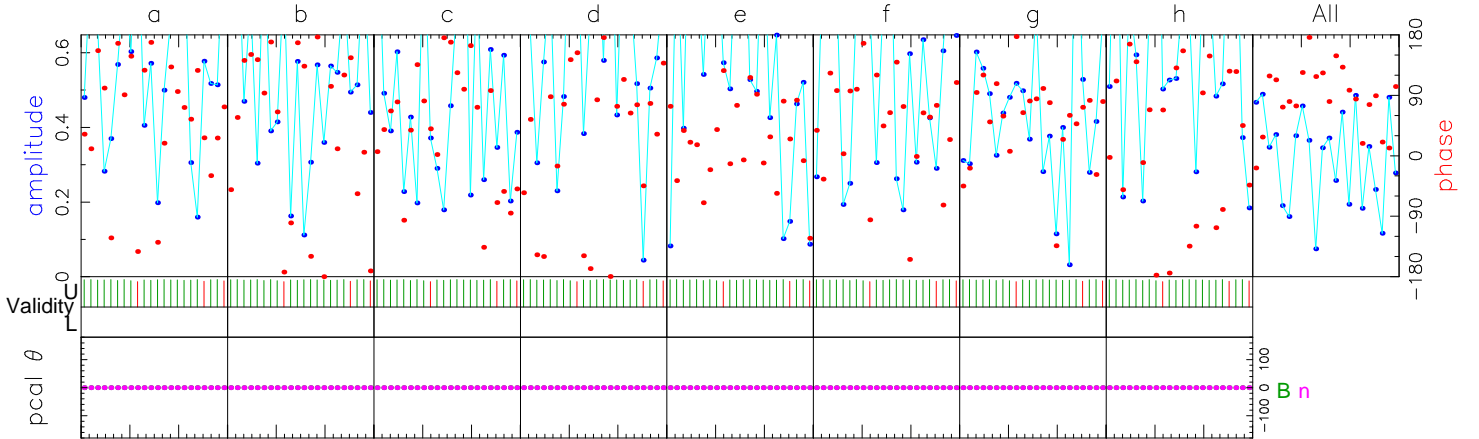
2020:014:135814

RA & Dec (J2000)

12h29m06.699731s

+02°03'08.598201"

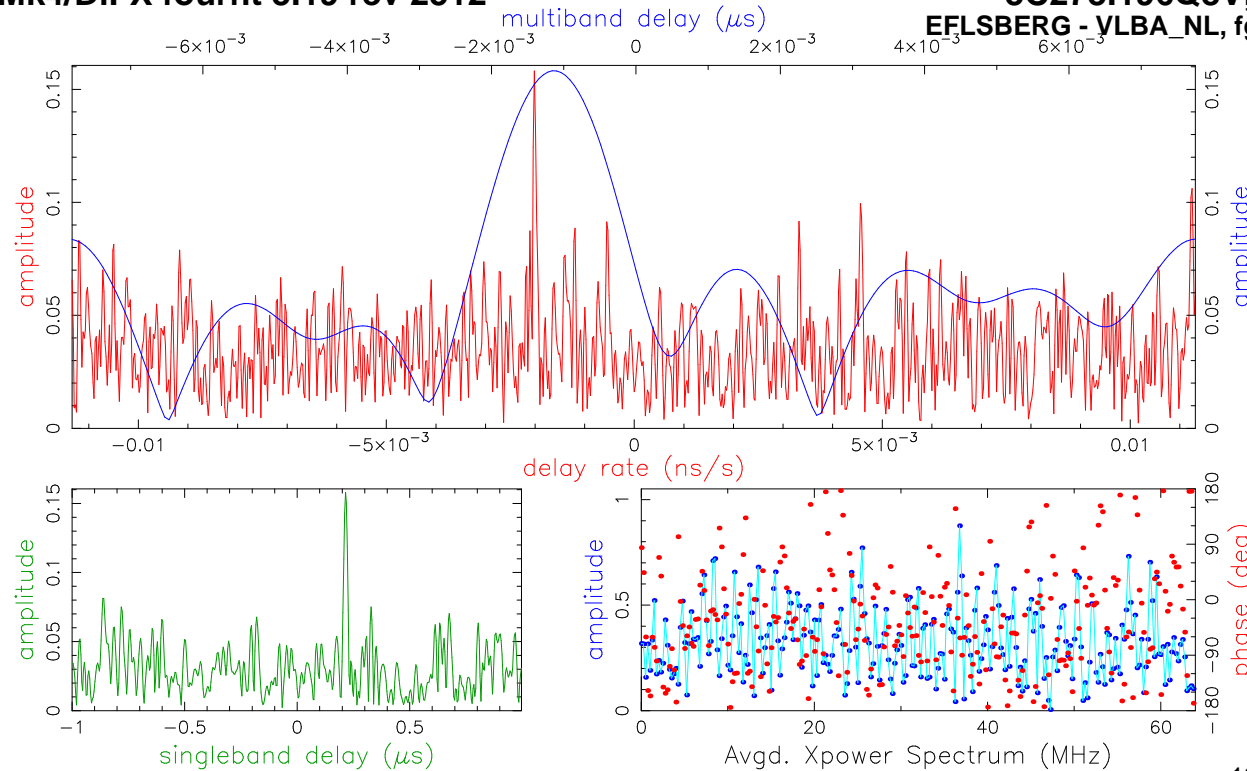
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 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 | APs used | |
| 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 | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -2.78377374734E+02 | | | | | | | | Resid mbdelay (usec) | 2.44157E-03 +/- 1.4E-04 |
| Sband delay (usec) | -2.78383562803E+02 | | | | | | | | Resid sbdelay (usec) | -3.74650E-03 +/- 1.1E-03 |
| Phase delay (usec) | -2.78379813517E+02 | | | | | | | | Resid phdelay (usec) | 2.78644E-06 +/- 4.7E-07 |
| Delay rate (us/s) | -1.62878379467E+00 | | | | | | | | Resid rate (us/s) | -7.56428E-08 +/- 4.5E-09 |
| Total phase (deg) | | -49.1 | | | | | | | Resid phase (deg) | 86.4 +/- 14.6 |
| | RMS | Theor. | Amplitude | 0.216 +/- 0.028 | | | | | PCal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| ph/seg (deg) | 47.4 | 34.3 | Search (1024X32) | 0.209 | | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 75.4 | 59.8 | Interp. | 0.000 | | | | | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 44.5 | 20.7 | Inc. seg. avg. | 0.272 | | | | | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 42.3 | 36.1 | Inc. frq. avg. | 0.267 | | | | | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |
| | | | | | | | | | nlags: 256 | t_cohere infinite |

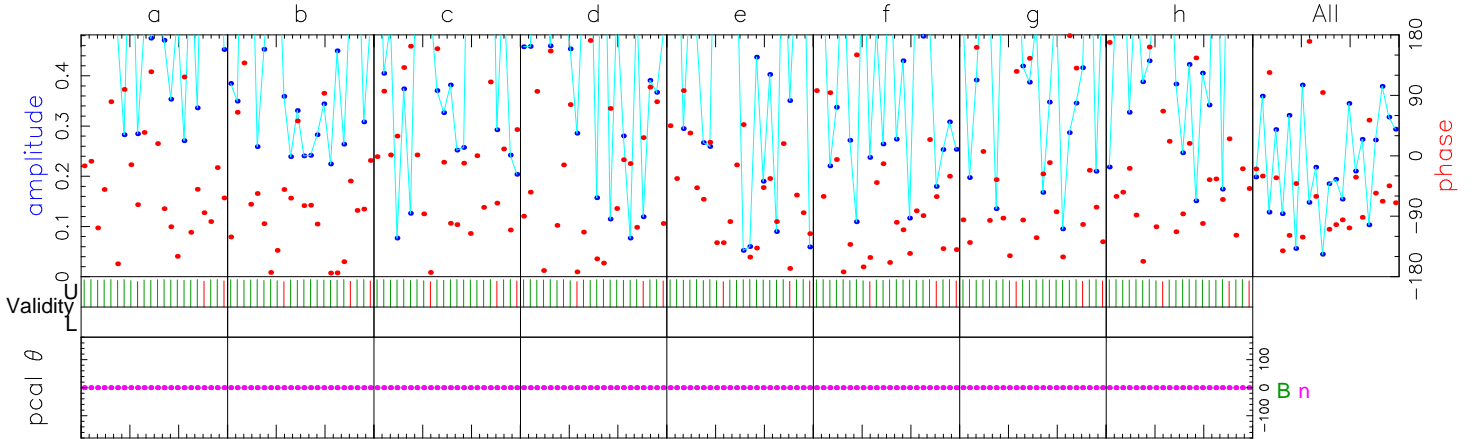
B: az 234.2 el 28.0 pa 31.1 n: az 115.5 el 28.3 pa -42.4 u,v (fr/asec) 9334.780 938.173 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bn..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bn.W.27.196Q8V

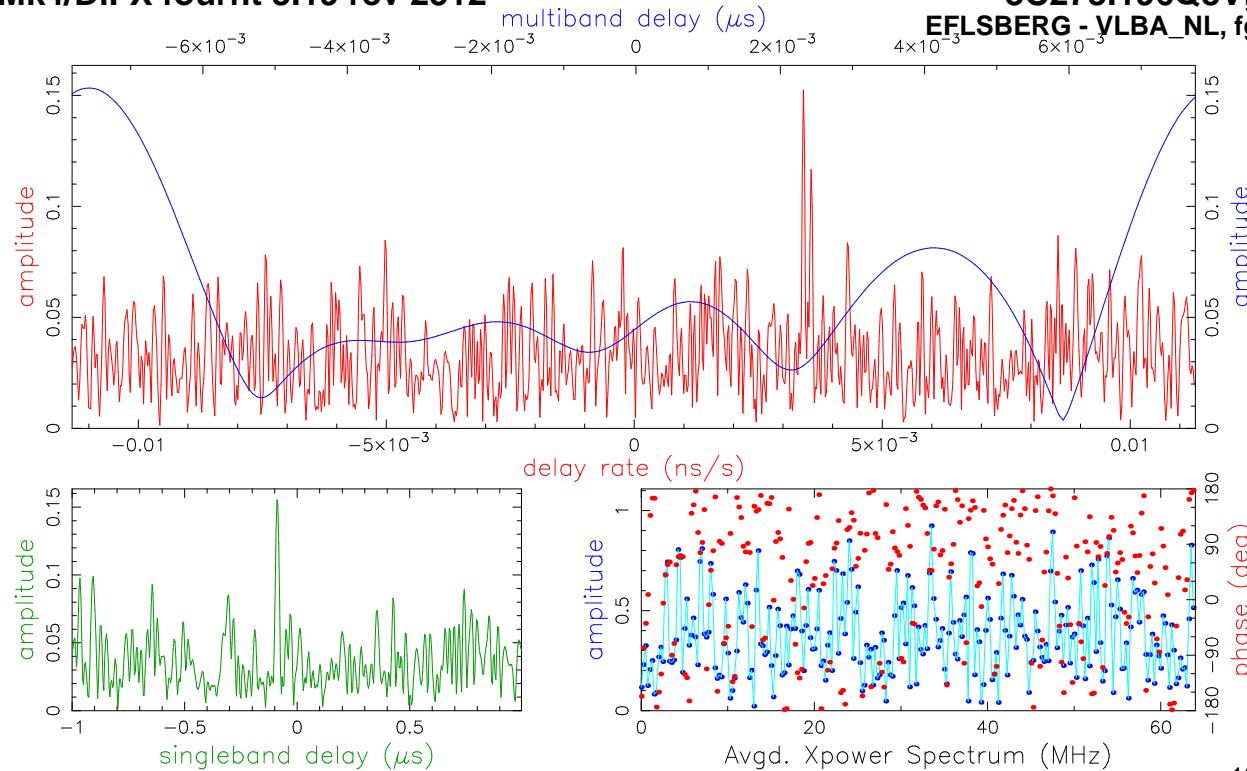


Fringe quality 0
 SNR 5.8
 Int time 176.371
 Amp 0.161
 Phase -75.2
 PFD 6.6e-01
 Delays (us)
 SBD 0.215551
 MBD -0.001100
 Fringe rate (Hz)
 -0.173132
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153437
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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 | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -2.78162166290E+02 | -2.78164264803E+02 | -2.78379818730E+02 | -1.62878572892E+00 | -2.78379816303E+02 | -1.9315279E+01 | -5.3399998E-07 | -1.62878371903E+00 | | |
| Sband delay (usec) | -2.78162166290E+02 | -2.78164264803E+02 | -2.78379818730E+02 | -1.62878572892E+00 | -2.78379816303E+02 | -1.9315279E+01 | -5.3399998E-07 | -1.62878371903E+00 | | |
| Phase delay (usec) | -2.78379818730E+02 | -2.78379818730E+02 | -2.78379818730E+02 | -2.78379818730E+02 | -2.78379818730E+02 | -2.78379818730E+02 | -2.78379818730E+02 | -2.78379818730E+02 | | |
| Delay rate (us/s) | -1.62878572892E+00 | -1.62878572892E+00 | -1.62878572892E+00 | -1.62878572892E+00 | -1.62878572892E+00 | -1.62878572892E+00 | -1.62878572892E+00 | -1.62878572892E+00 | | |
| Total phase (deg) | | | -210.7 | | | | | | | |
| 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) | | | | | | | | | | |
| pcal θ | | | | | | | | | | |
| pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| amplitude | | | | | | | | | | |
| phase | | | | | | | | | | |
| Validity | | | | | | | | | | |
| pcal θ | | | | | | | | | | |
| RMS | | | | | | | | | | |
| Theor. | | | | | | | | | | |
| Amplitude | | | | | | | | | | |
| Search (1024X32) | | | | | | | | | | |
| Interp. | | | | | | | | | | |
| Inc. seg. avg. | | | | | | | | | | |
| Inc. frq. avg. | | | | | | | | | | |
| ph/seg (deg) | | | | | | | | | | |
| amp/seg (%) | | | | | | | | | | |
| ph/frq (deg) | | | | | | | | | | |
| amp/frq (%) | | | | | | | | | | |
| B: az 234.2 el 28.0 pa 31.1 | | | | | | | | | | |
| n: az 115.5 el 28.3 pa -42.4 | | | | | | | | | | |
| u,v (fr/asec) 9334.780 938.173 | | | | | | | | | | |
| Control file: cf_1234_gmva | | | | | | | | | | |
| Input file: /Exps/c201e/v1/1234/No0046/Bn..196Q8V | | | | | | | | | | |
| Output file: /Exps/c201e/v1/1234/No0046/Bn.W.36.196Q8V | | | | | | | | | | |

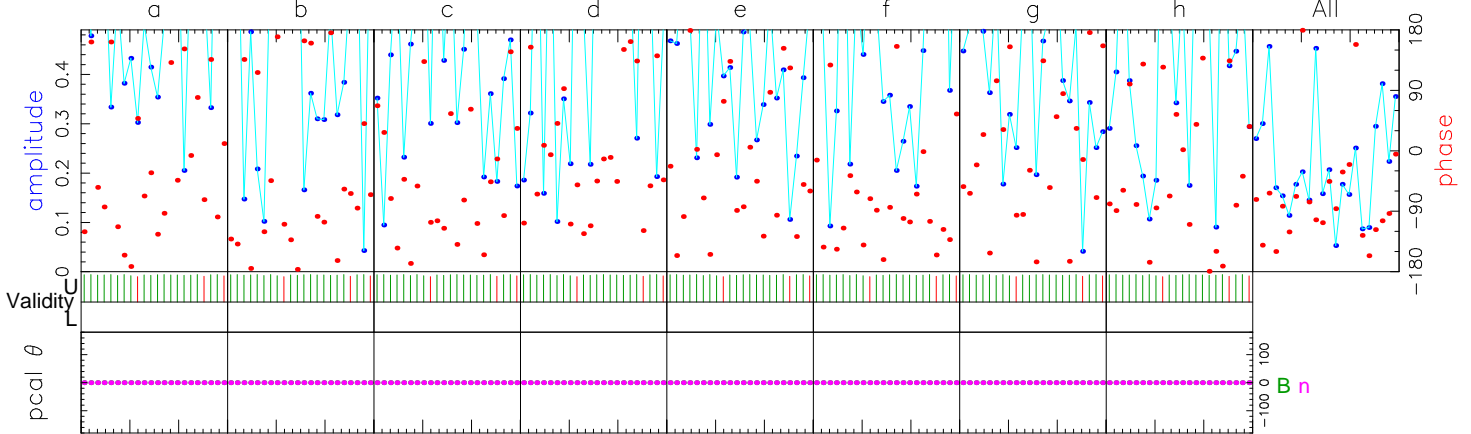


Fringe quality 0

SNR 5.7
Int time 176.369
Amp 0.163
Phase -93.1
PFD 7.4e-01
Delays (us)
SBD -0.088324
MBD -0.007726
Fringe rate (Hz) 0.295063
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153438
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

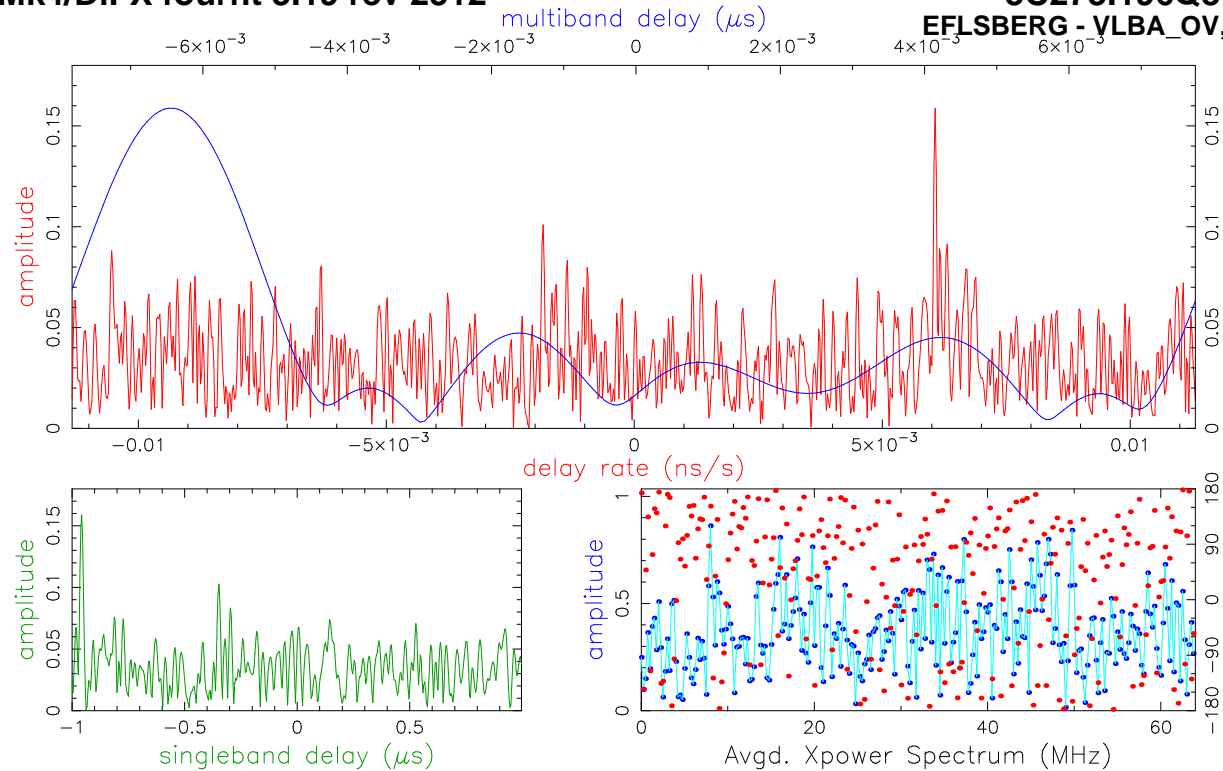


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -81.3 | -127.9 | -104.1 | -59.8 | -81.0 | -104.0 | -20.6 | -108.0 | Phase | -93.1 |
| | 0.2 | 0.3 | 0.1 | 0.2 | 0.1 | 0.3 | 0.1 | 0.0 | Ampl. | 0.2 |
| | 408.0 | 235.5 | 457.5 | 93.1 | 70.1 | 234.8 | 69.7 | 132.0 | Sbd box | 234.4 |
| 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) | -2.78465667014E+02 | | Apriori delay (usec) | | -2.78379816303E+02 | | Resid mbdelay (usec) | | -7.72571E-03 | +/- 1.9E-04 |
| Sband delay (usec) | -2.78468140553E+02 | | Apriori clock (usec) | | -1.9315279E+01 | | Resid sbdelay (usec) | | -8.83242E-02 | +/- 1.5E-03 |
| Phase delay (usec) | -2.78379819307E+02 | | Apriori clockrate (us/s) | | -5.3399998E-07 | | Resid phdelay (usec) | | -3.00336E-06 | +/- 6.5E-07 |
| Delay rate (us/s) | -1.62878029364E+00 | | Apriori rate (us/s) | | -1.62878371903E+00 | | Resid rate (us/s) | | 3.42539E-06 | +/- 6.2E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 1.78196318208E-06 | | Resid phase (deg) | | -93.1 | +/- 20.0 |

ph/seg (deg) 49.0 47.0 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.2 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.2 28.3 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 62.4 49.5 Inc. frq. avg. 0.158 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 234.2 el 28.0 pa 31.1 n: az 115.5 el 28.3 pa -42.4 u,v (fr/asec) 9334.780 938.173 simultaneous interpolator

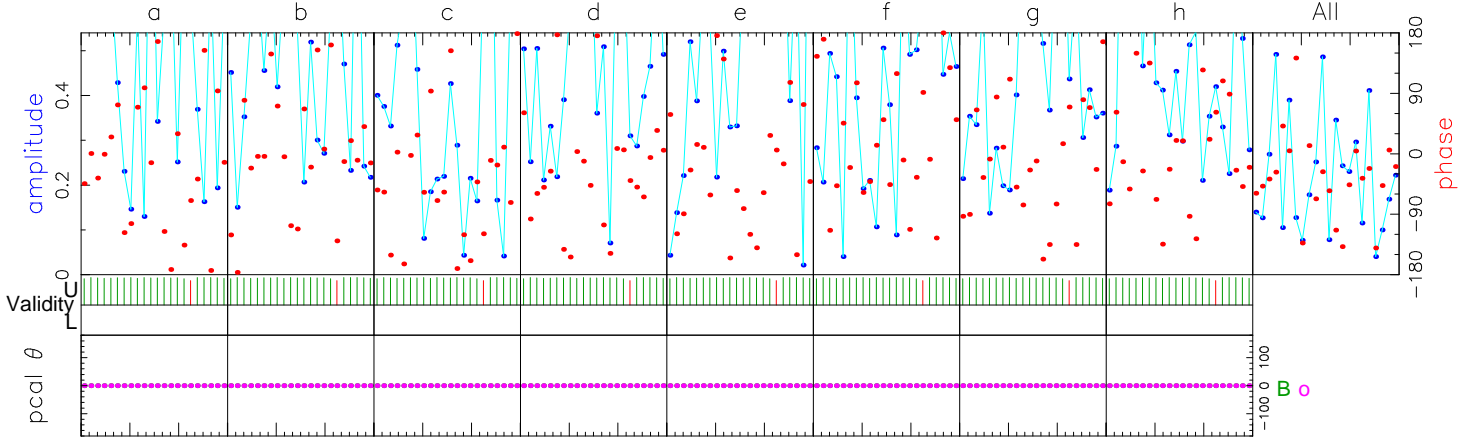
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bo
EFLSBERG - VLBA_OV, fgroup W, pol RL



Fringe quality 0
SNR 5.8
Int time 176.730
Amp 0.180
Phase -34.3
PFD 5.7e-01
Delays (us)
SBD -0.957865
MBD -0.006475
Fringe rate (Hz) 0.523845
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build 2020:206:020932
2020:206:153448
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

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

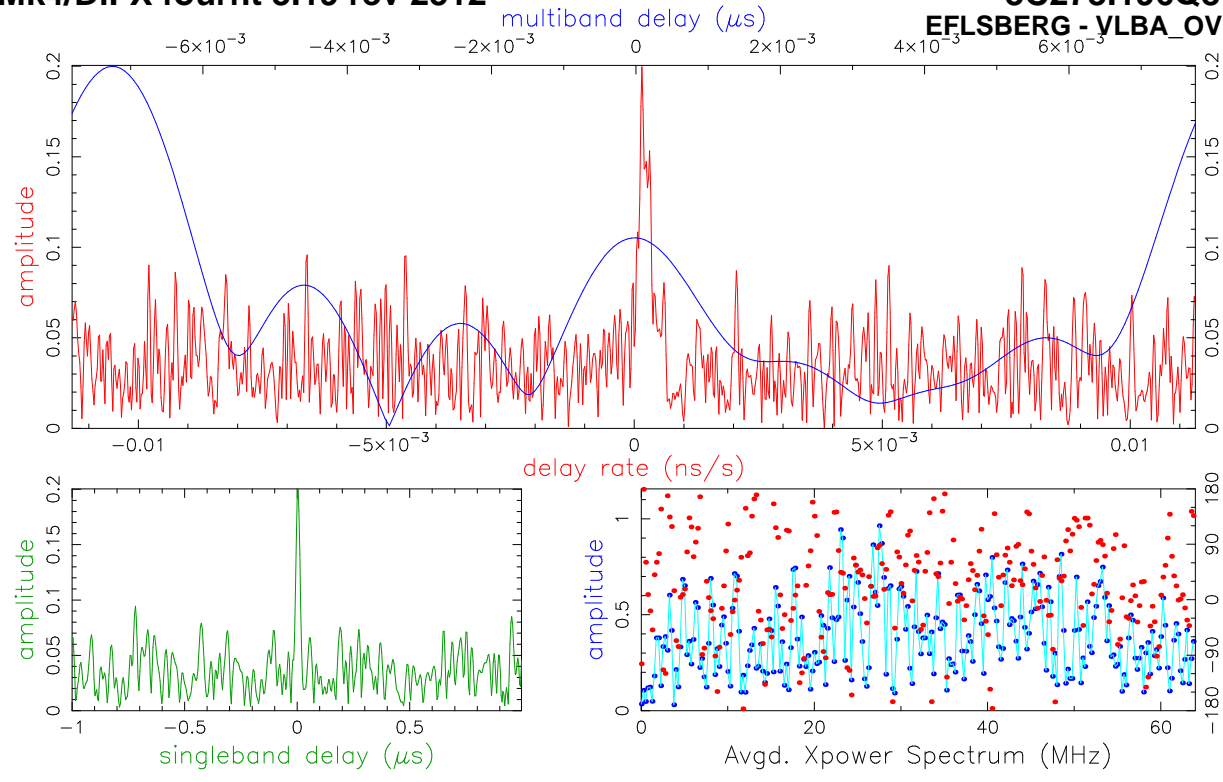


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -32.8 | -21.3 | -63.1 | -25.6 | -49.0 | -28.2 | -35.2 | -18.8 | Phase | -34.3 |
| | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | Ampl. | 0.2 |
| | 246.9 | 344.1 | 318.8 | 79.0 | 400.2 | 394.4 | 391.7 | 37.5 | Sbd box | 11.8 |
| 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 | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:o | 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 | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 6.25415276892E+03 | | Apriori delay (usec) | | 6.25511236920E+03 | | Resid mbdelay (usec) | | -6.47528E-03 | +/- 1.9E-04 |
| Sband delay (usec) | 6.25415450420E+03 | | Apriori clock (usec) | | -7.0956001E+00 | | Resid sbdelay (usec) | | -9.57865E-01 | +/- 1.5E-03 |
| Phase delay (usec) | 6.25511236810E+03 | | Apriori clockrate (us/s) | | -4.0100001E-07 | | Resid phdelay (usec) | | -1.10591E-06 | +/- 6.4E-07 |
| Delay rate (us/s) | -1.92610905569E+00 | | Apriori rate (us/s) | | -1.92611513702E+00 | | Resid rate (us/s) | | 6.08133E-06 | +/- 6.1E-09 |
| Total phase (deg) | 139.7 | | Apriori accel (us/s/s) | | -3.26545518512E-05 | | Resid phase (deg) | | -34.3 | +/- 19.8 |

ph/seg (deg) 62.3 46.4 Amplitude 0.180 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 91.0 80.9 Search (1024X32) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 16.2 28.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 30.3 48.8 Inc. seg. avg. 0.189 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
B: az 234.2 el 28.0 pa 31.1 o: az 94.9 el 9.6 pa -52.5 u,v (fr/asec) 11021.044 1386.122 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bo..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bo.W.109.196Q8V simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bo
EFLSBERG - VLBA_OV, fgroup W, pol LL

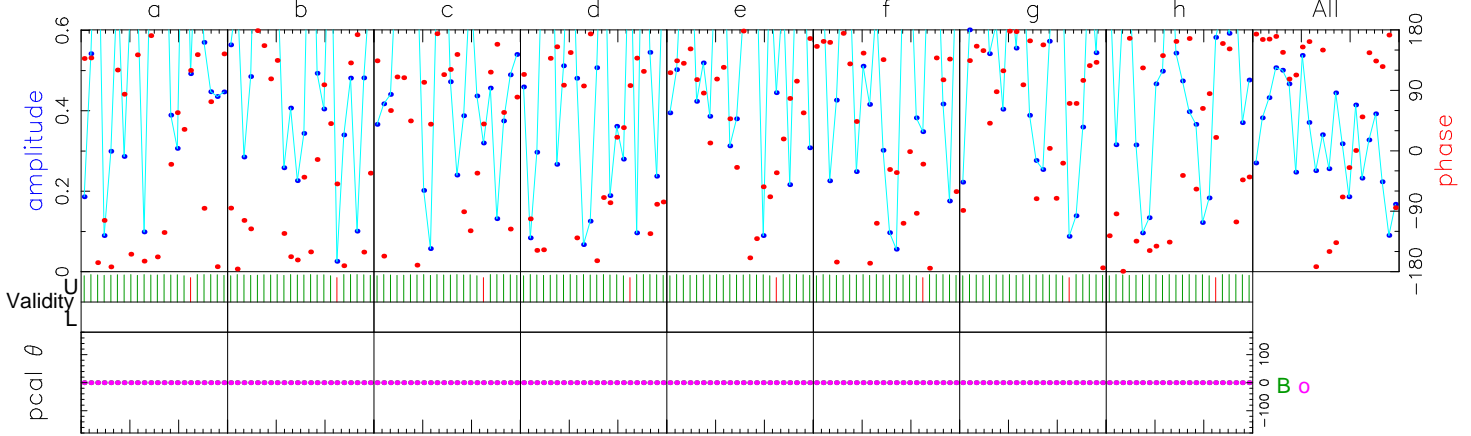


Fringe quality 9

SNR 7.3
Int time 176.730
Amp 0.200
Phase 158.4
PFD 4.9e-05
Delays (us)
SBD 0.003027
MBD -0.007301
Fringe rate (Hz)
0.012708
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153442
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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 | 166.2 | -174.7 | 122.2 | 168.0 | 113.8 | 175.9 | 136.3 | -152.0 | Phase | 158.4 |
| B | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Ampl. | 0.2 |
| o | 258.7 | 255.8 | 145.7 | 151.7 | 86.4 | 500.9 | 72.6 | 147.4 | Sbd box | 257.8 |
| B | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B: o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B: o | 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 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |

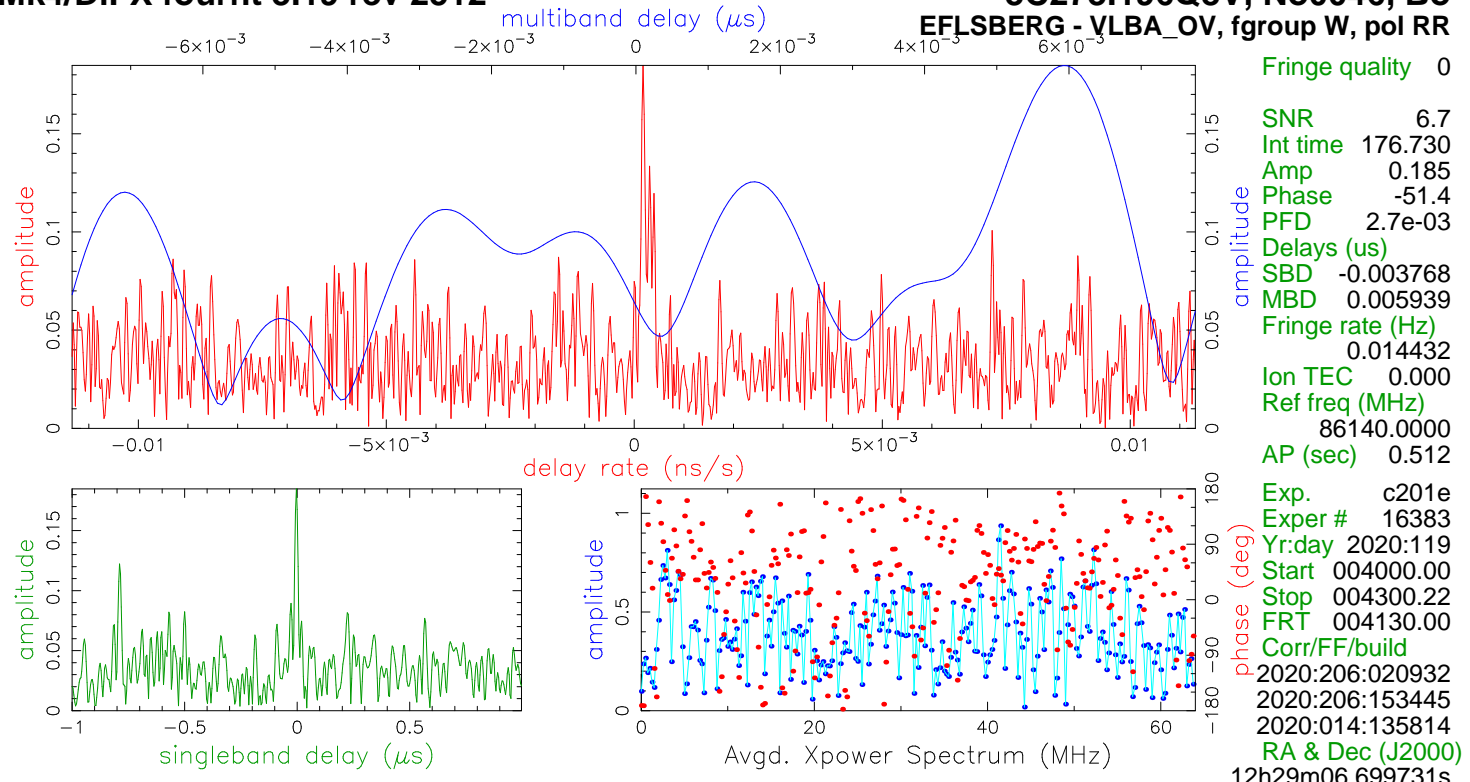
Group delay (usec)(sbd) 6.25512069361E+03 Apriori delay (usec) 6.25511236920E+03 Resid mbdelay (usec) -7.30059E-03 +/- 1.5E-04
 Sband delay (usec) 6.25511539595E+03 Apriori clock (usec) -7.0956001E+00 Resid sbdelay (usec) 3.02675E-03 +/- 1.2E-03
 Phase delay (usec) 6.25511237431E+03 Apriori clockrate (us/s) -4.0100001E-07 Resid phdelay (usec) 5.10757E-06 +/- 5.1E-07
 Delay rate (us/s) -1.92611498950E+00 Apriori rate (us/s) -1.92611513702E+00 Resid rate (us/s) 1.47523E-07 +/- 4.9E-09
 Total phase (deg) 332.4 Apriori accel (us/s/s) -3.26545518512E-05 Resid phase (deg) 158.4 +/- 15.7

RMS Theor. Amplitude 0.200 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 71.6 36.9 Search (1024X32) 0.196 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 89.5 64.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 35.2 22.2 Inc. seg. avg. 0.278 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 20.8 38.8 Inc. frq. avg. 0.214 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

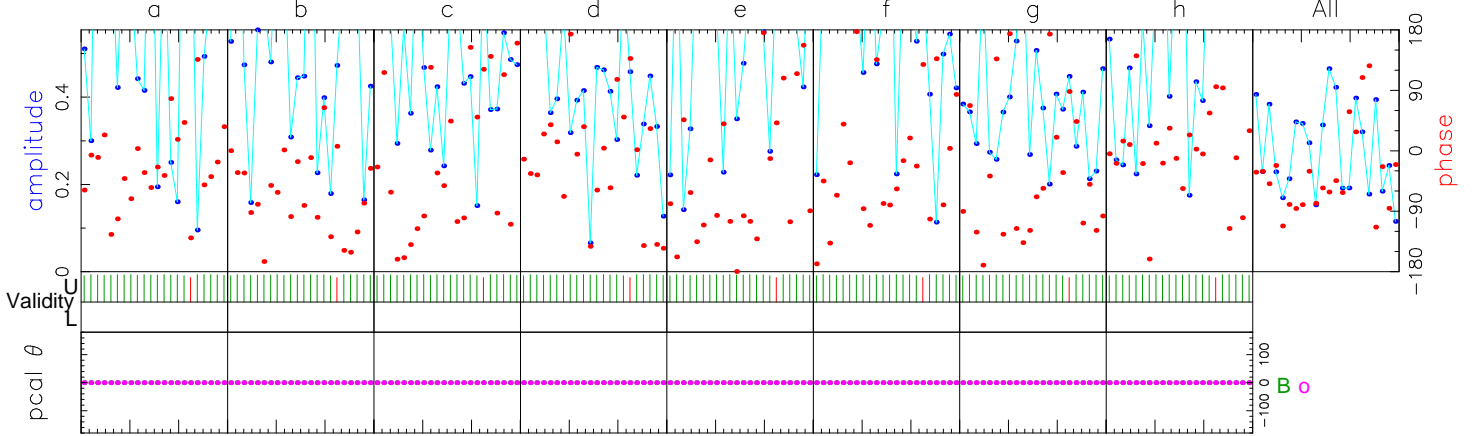
B: az 234.2 el 28.0 pa 31.1 o: az 94.9 el 9.6 pa -52.5 u,v (fr/asec) 11021.044 1386.122 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bo..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bo.W.69.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bo
EFLSBERG - VLBA_OV, fgroup W, pol RR



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



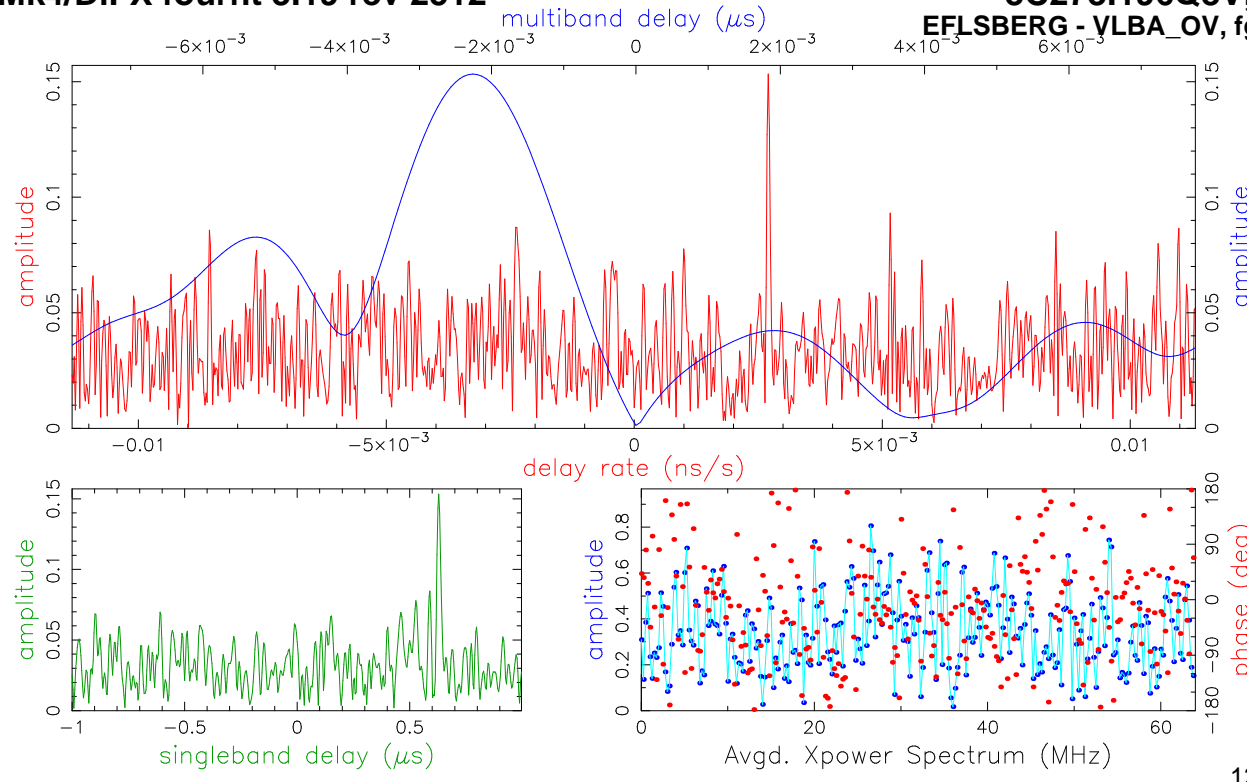
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -29.2 | -56.0 | -131.7 | -7.4 | -119.1 | -61.8 | -110.0 | -1.7 | Phase | -51.4 |
| | 0.4 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | Ampl. | 0.2 |
| | 255.5 | 256.8 | 95.9 | 200.0 | 258.4 | 452.0 | 412.8 | 255.8 | Sbd box | 256.0 |
| 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 | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:o | 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 | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | 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) | 6.25510268366E+03 | | Apriori delay (usec) | | 6.25511236920E+03 | | Resid mbdelay (usec) | | 5.93946E-03 | +/- 1.6E-04 |
| Sband delay (usec) | 6.25510860095E+03 | | Apriori clock (usec) | | -7.0956001E+00 | | Resid sbdelay (usec) | | -3.76825E-03 | +/- 1.3E-03 |
| Phase delay (usec) | 6.25511236755E+03 | | Apriori clockrate (us/s) | | -4.0100001E-07 | | Resid phdelay (usec) | | -1.65721E-06 | +/- 5.5E-07 |
| Delay rate (us/s) | -1.92611496948E+00 | | Apriori rate (us/s) | | -1.92611513702E+00 | | Resid rate (us/s) | | 1.67536E-07 | +/- 5.3E-09 |
| Total phase (deg) | 122.6 | | Apriori accel (us/s/s) | | -3.26545518512E-05 | | Resid phase (deg) | | -51.4 | +/- 17.1 |

| | RMS | Theor. | Amplitude | 0.185 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 64.0 | 40.0 | Search (1024X32) | 0.179 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 75.6 | 69.8 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 57.0 | 24.1 | Inc. seg. avg. | 0.226 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 59.9 | 42.1 | Inc. frq. avg. | 0.232 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

B: az 234.2 el 28.0 pa 31.1 o: az 94.9 el 9.6 pa -52.5 u,v (fr/asec) 11021.044 1386.122 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bo..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bo.W.84.196Q8V

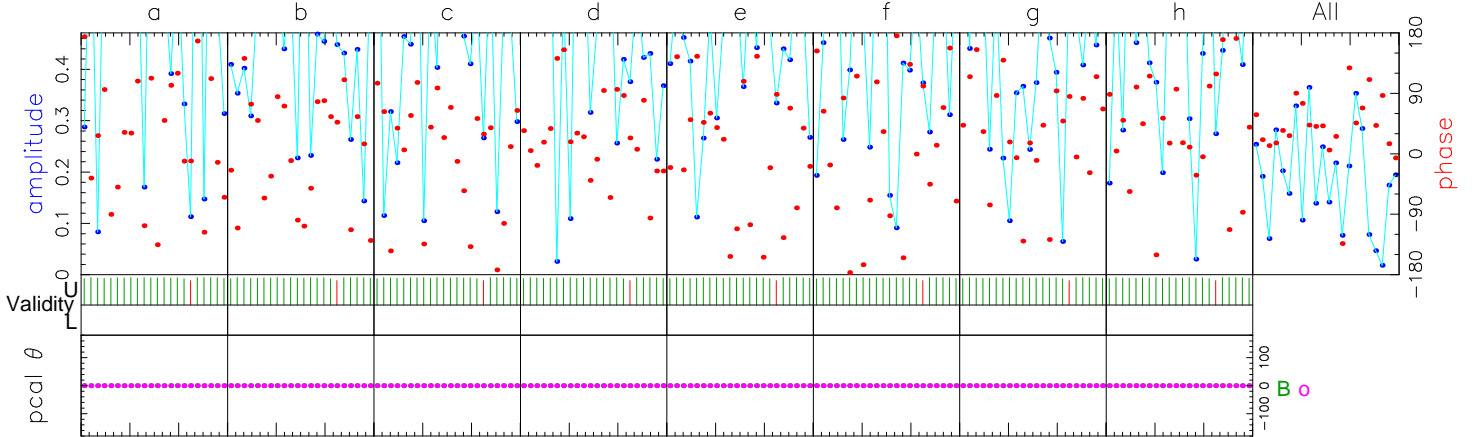
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bo
EFLSBERG - VLBA_OV, fgroup W, pol LR



Fringe quality 0
SNR 5.6
Int time 176.730
Amp 0.157
Phase 44.4
PFD 9.5e-01
Delays (us)
SBD 0.628504
MBD -0.002266
Fringe rate (Hz) 0.232291
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build 2020:206:020932
2020:206:153447
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

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



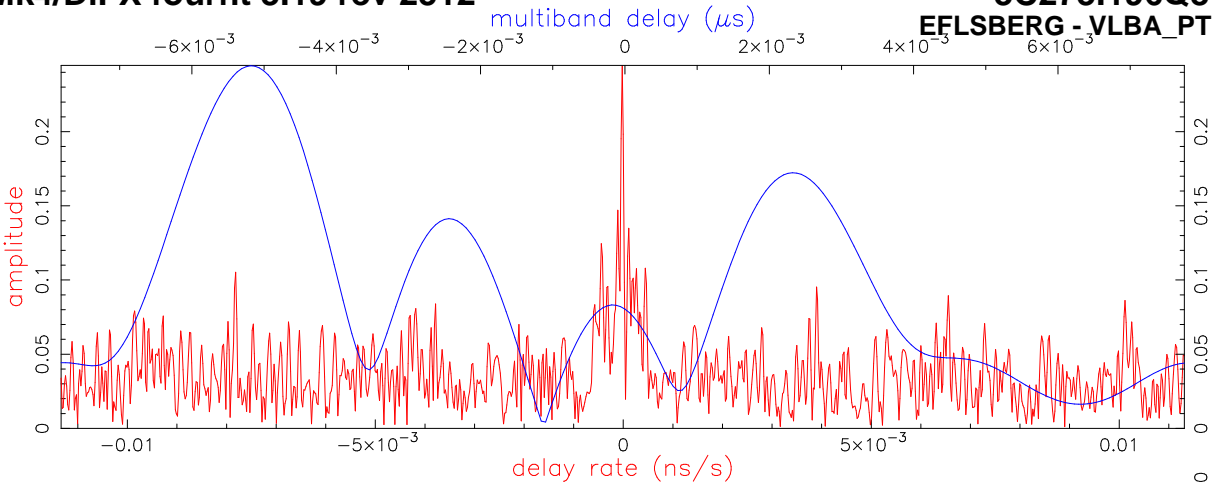
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| 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 | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:o | 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 | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| o | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | 6.25573510357E+03 | | Apriori delay (usec) | | 6.25511236920E+03 | | Resid mbdelay (usec) | | -2.26563E-03 | +/- 1.9E-04 |
| Sband delay (usec) | 6.25574087320E+03 | | Apriori clock (usec) | | -7.0956001E+00 | | Resid sbdelay (usec) | | 6.28504E-01 | +/- 1.5E-03 |
| Phase delay (usec) | 6.25511237064E+03 | | Apriori clockrate (us/s) | | -4.0100001E-07 | | Resid phdelay (usec) | | 1.43112E-06 | +/- 6.6E-07 |
| Delay rate (us/s) | -1.92611244035E+00 | | Apriori rate (us/s) | | -1.92611513702E+00 | | Resid rate (us/s) | | 2.69667E-06 | +/- 6.4E-09 |
| Total phase (deg) | 218.4 | | Apriori accel (us/s/s) | | -3.26545518512E-05 | | Resid phase (deg) | | 44.4 | +/- 20.5 |

ph/seg (deg) 50.8 48.2 Search (1024X32) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 66.7 84.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 26.5 29.1 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 55.7 50.7 Inc. frq. avg. 0.148 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 234.2 el 28.0 pa 31.1 o: az 94.9 el 9.6 pa -52.5 u,v (fr/asec) 11021.044 1386.122 simultaneous interpolator

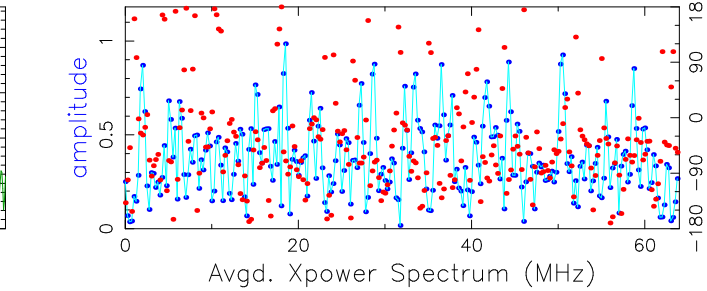
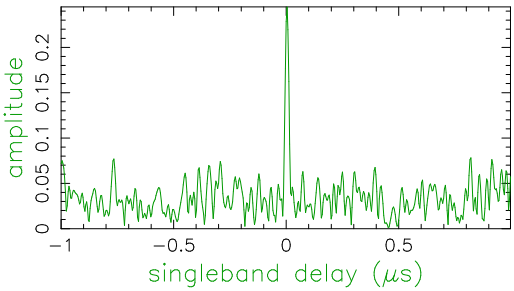
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bo..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bo.W.99.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

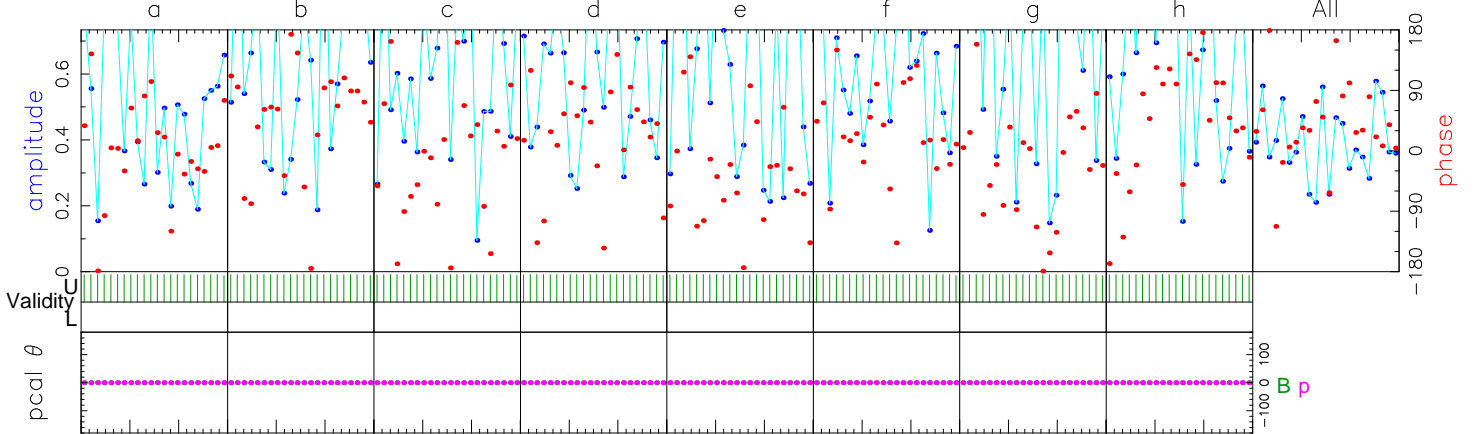
3C273.196Q8V, No0046, Bp
EFLSBERG - VLBA_PT, fgroup W, pol LL



Fringe quality 9
SNR 9.0
Int time 179.602
Amp 0.245
Phase 35.5
PFD 5.8e-11
Delays (us)
SBD 0.003451
MBD -0.005186
Fringe rate (Hz) -0.001029
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build 2020:206:020932
2020:206:153434
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"



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 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:p | 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 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| p | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |

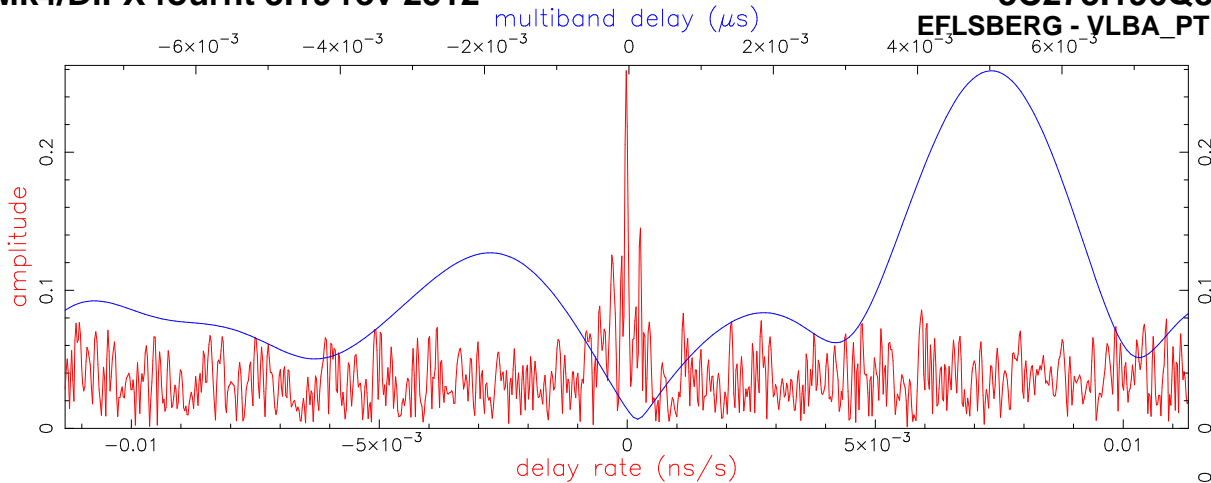
| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 3.17353412438E+03 | Apriori delay (usec) | 3.17352368527E+03 | Resid mbdelay (usec) | -5.18589E-03 | +/- | 1.2E-04 |
| Sband delay (usec) | 3.17352713627E+03 | Apriori clock (usec) | -4.2874489E+00 | Resid sbdelay (usec) | 3.45100E-03 | +/- | 9.6E-04 |
| Phase delay (usec) | 3.17352368642E+03 | Apriori clockrate (us/s) | -4.0399999E-07 | Resid phdelay (usec) | 1.14477E-06 | +/- | 4.1E-07 |
| Delay rate (us/s) | -1.90874858987E+00 | Apriori rate (us/s) | -1.90874857793E+00 | Resid rate (us/s) | -1.19406E-08 | +/- | 4.0E-09 |
| Total phase (deg) | 125.2 | Apriori accel (us/s/s) | -1.61014407280E-05 | Resid phase (deg) | 35.5 | +/- | 12.8 |

| | | | | | | | | | | | | |
|--------------|------|------------------|-------|------------------------|-------|-------------------|-----------------------------|----------------------|-------------------|------------------|-------|------|
| ph/seg (deg) | 62.4 | RMS | 30.0 | Theor. | 30.0 | Amplitude | 0.245 +/- 0.027 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | |
| amp/seg (%) | 76.2 | Search (1024X32) | 0.229 | Interp. | 0.000 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 | 1.000 | | |
| ph/frq (deg) | 44.5 | Inc. seg. avg. | 0.349 | Inc. frq. avg. | 0.295 | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 | |
| amp/frq (%) | 33.0 | Inc. frq. avg. | 0.295 | Sample rate (MSamp/s): | 128 | Data rate (Mb/s): | 2048 | nlags: 256 | t_cohere infinite | ion window (TEC) | 0.00 | 0.00 |

B: az 234.2 el 28.0 pa 31.1 p: az 100.4 el 18.2 pa -54.4 u,v (fr/asec) 10930.153 1796.754 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bp..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bp.W.19.196Q8V

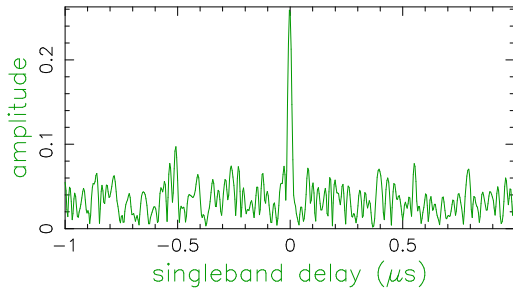
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bp
EFLSBERG - VLBA_PT, fgroup W, pol RR

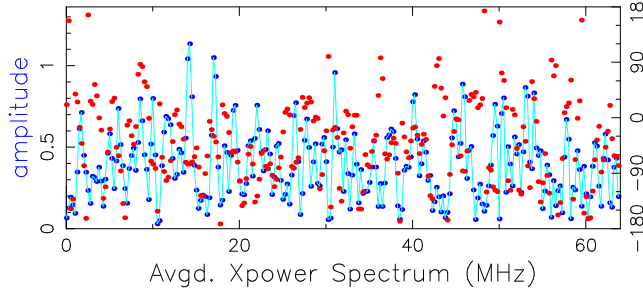


Fringe quality 9

SNR 9.6
Int time 179.602
Amp 0.263
Phase -132.1
PFD 1.2e-13
Delays (us)
SBD -0.002269
MBD 0.005043
Fringe rate (Hz)
-0.001341
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

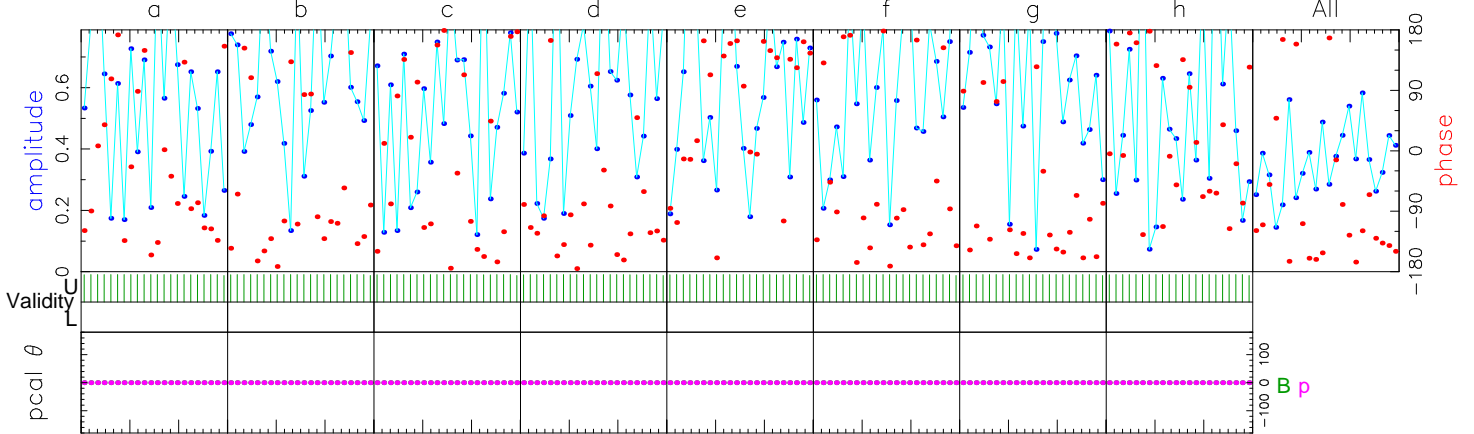


delay rate (ns/s)



Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153441
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



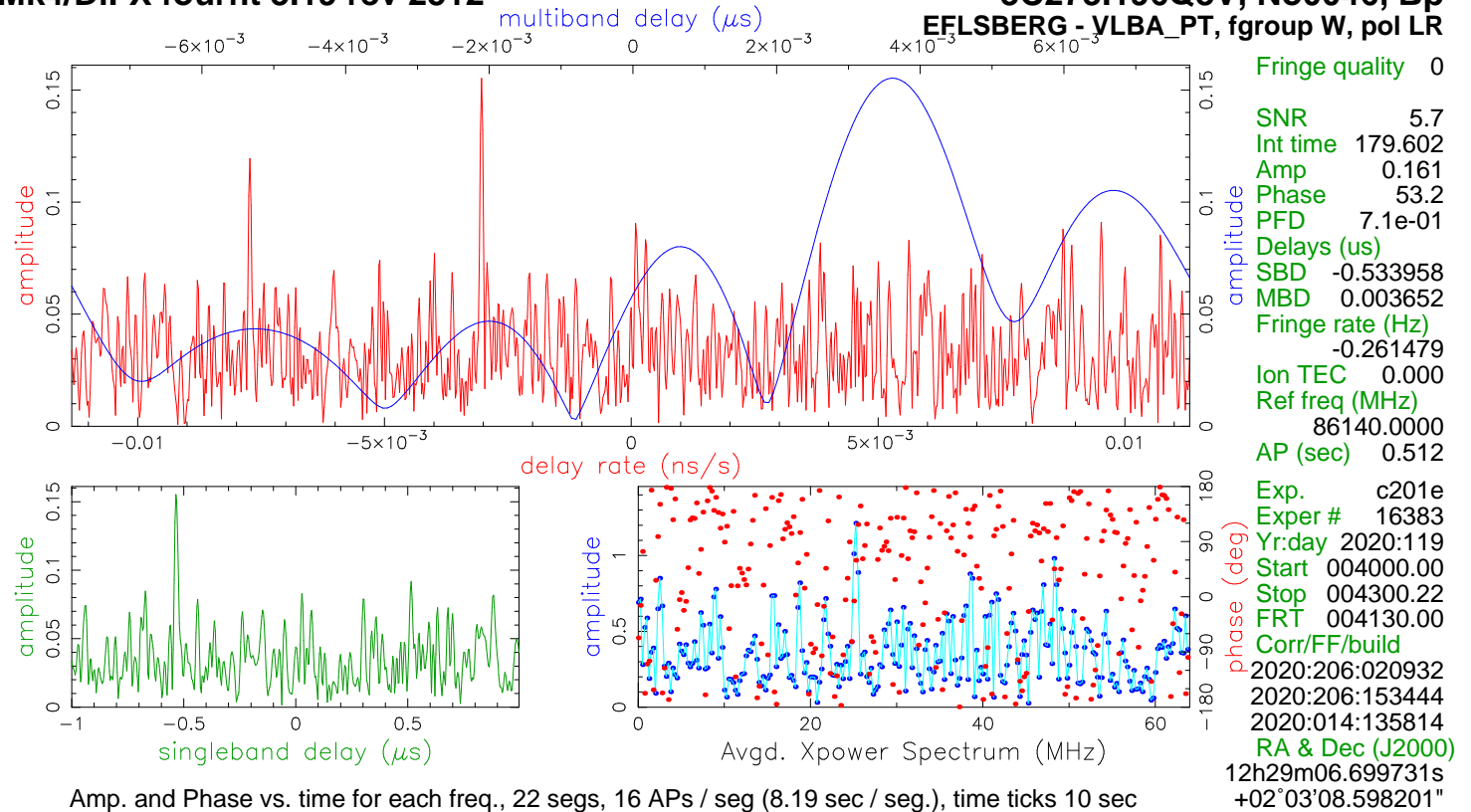
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -85.7 | -125.7 | -164.8 | -121.7 | 141.0 | -131.4 | -140.7 | -72.6 | Phase | -132.1 |
| | 0.2 | 0.4 | 0.3 | 0.4 | 0.2 | 0.4 | 0.3 | 0.2 | Ampl. | 0.3 |
| | 172.1 | 255.8 | 256.1 | 256.4 | 185.5 | 257.2 | 257.3 | 127.8 | Sbd box | 256.4 |
| 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 | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:p | 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 | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| p | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 3.17352872816E+03 | | Apriori delay (usec) | | 3.17352368527E+03 | | Resid mbdelay (usec) | | 5.04289E-03 | +/- 1.1E-04 |
| Sband delay (usec) | 3.17352141627E+03 | | Apriori clock (usec) | | -4.2874489E+00 | | Resid sbdelay (usec) | | -2.26900E-03 | +/- 8.9E-04 |
| Phase delay (usec) | 3.17352368101E+03 | | Apriori clockrate (us/s) | | -4.0399999E-07 | | Resid phdelay (usec) | | -4.26086E-06 | +/- 3.8E-07 |
| Delay rate (us/s) | -1.90874859350E+00 | | Apriori rate (us/s) | | -1.90874857793E+00 | | Resid rate (us/s) | | -1.55727E-08 | +/- 3.7E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -1.61014407280E-05 | | Resid phase (deg) | | -132.1 | +/- 11.9 |

| | RMS | Theor. | Amplitude | 0.263 +/- 0.027 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------------|
| ph/seg (deg) | 59.8 | 27.9 | Search (1024X32) | 0.252 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 0.008 |
| amp/seg (%) | 57.3 | 48.7 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 0.011 |
| ph/frq (deg) | 49.2 | 16.8 | Inc. seg. avg. | 0.325 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 0.00 |
| amp/frq (%) | 42.1 | 29.4 | Inc. frq. avg. | 0.297 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | |

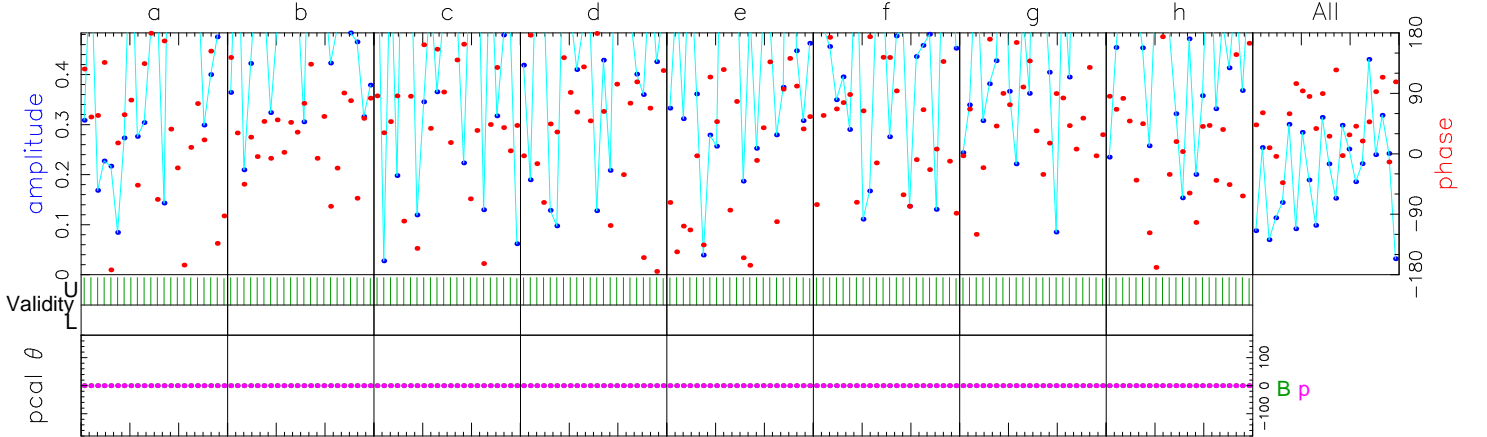
B: az 234.2 el 28.0 pa 31.1 p: az 100.4 el 18.2 pa -54.4 u,v (fr/asec) 10930.153 1796.754 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bp..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bp.W.65.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Bp
EFLSBERG - VLBA_PT, 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

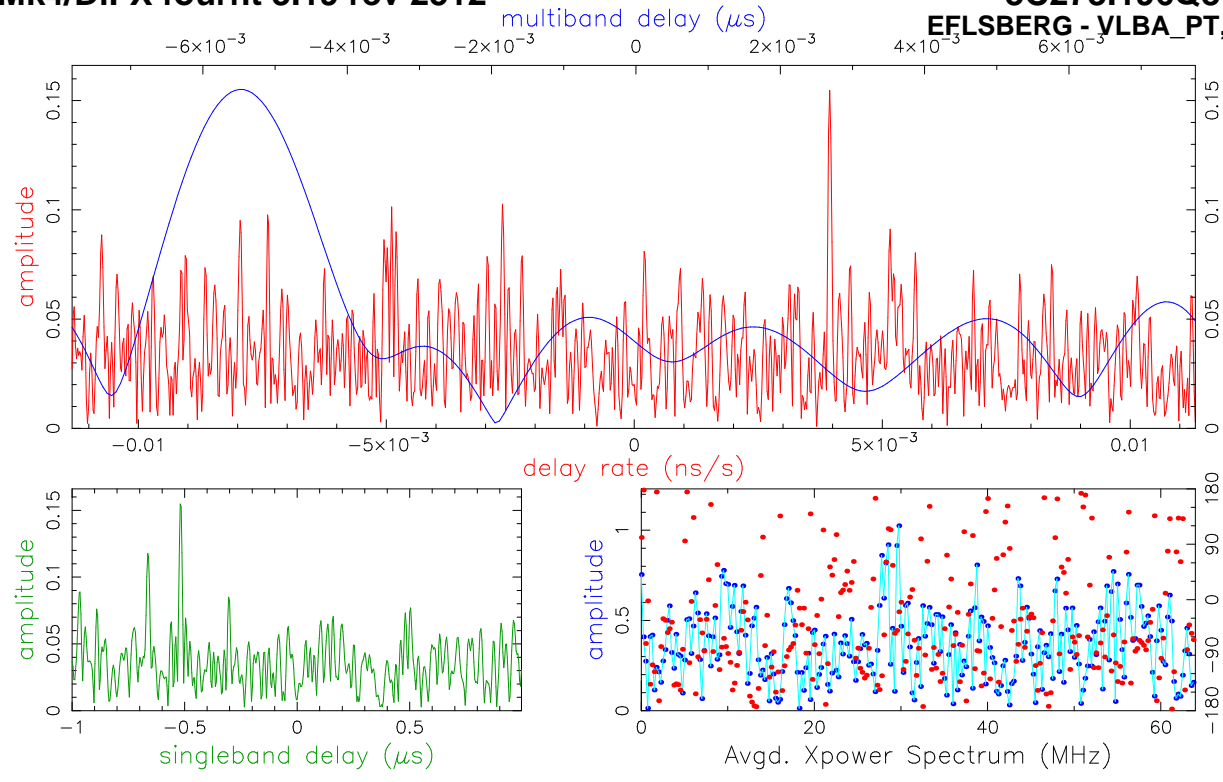


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|----------|--------------------|----------|----------|----------|--------------------|----------|----------|----------------------|--------------------------|
| U/L | 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 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:p | 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 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| p | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | | 3.17299608766E+03 | | | | 3.17352368527E+03 | | | Resid mbdelay (usec) | 3.65239E-03 +/- 1.9E-04 |
| Sband delay (usec) | | 3.17298972677E+03 | | | | -4.2874489E+00 | | | Resid sbdelay (usec) | -5.33958E-01 +/- 1.5E-03 |
| Phase delay (usec) | | 3.17352368699E+03 | | | | -4.0399999E-07 | | | Resid phdelay (usec) | 1.71643E-06 +/- 6.4E-07 |
| Delay rate (us/s) | | -1.90875161345E+00 | | | | -1.90874857793E+00 | | | Resid rate (us/s) | -3.03552E-06 +/- 6.2E-09 |
| Total phase (deg) | | | 143.0 | | | | | | Resid phase (deg) | 53.2 +/- 20.0 |

| | RMS | Theor. | Amplitude | 0.161 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 45.2 | 46.9 | Search (1024X32) | 0.154 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 70.0 | 81.8 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 41.0 | 28.3 | Inc. seg. avg. | 0.160 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 60.9 | 49.3 | Inc. frq. avg. | 0.162 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

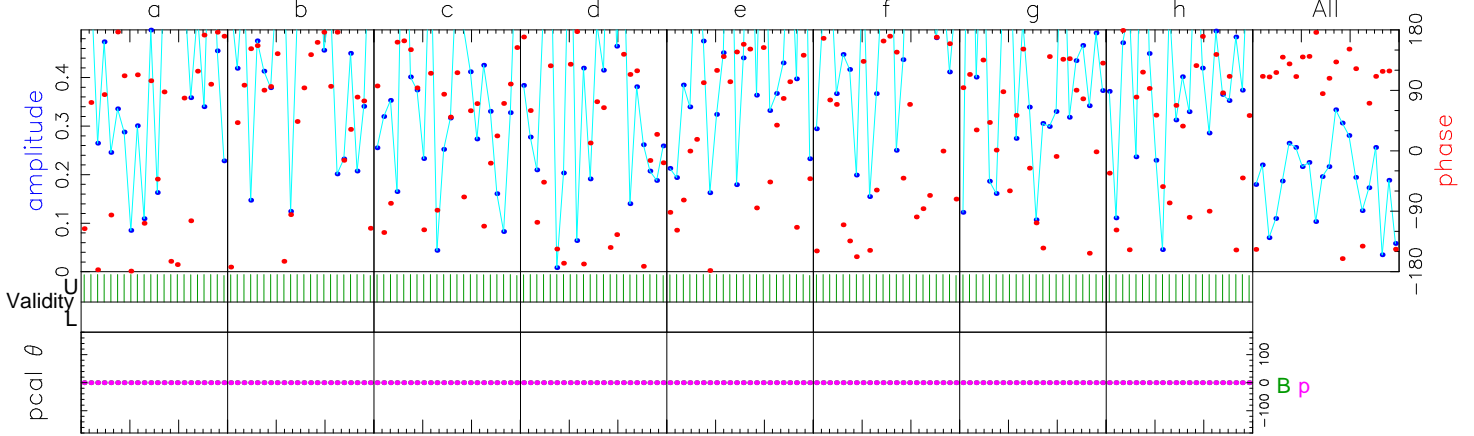
B: az 234.2 el 28.0 pa 31.1 p: az 100.4 el 18.2 pa -54.4 u,v (fr/asec) 10930.153 1796.754 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bp..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bp.W.78.196Q8V



Fringe quality 0
 SNR 5.8
 Int time 179.602
 Amp 0.166
 Phase 133.5
 PFD 5.9e-01
 Delays (us)
 SBD -0.517822
 MBD -0.005395
 Fringe rate (Hz)
 0.339790
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153446
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

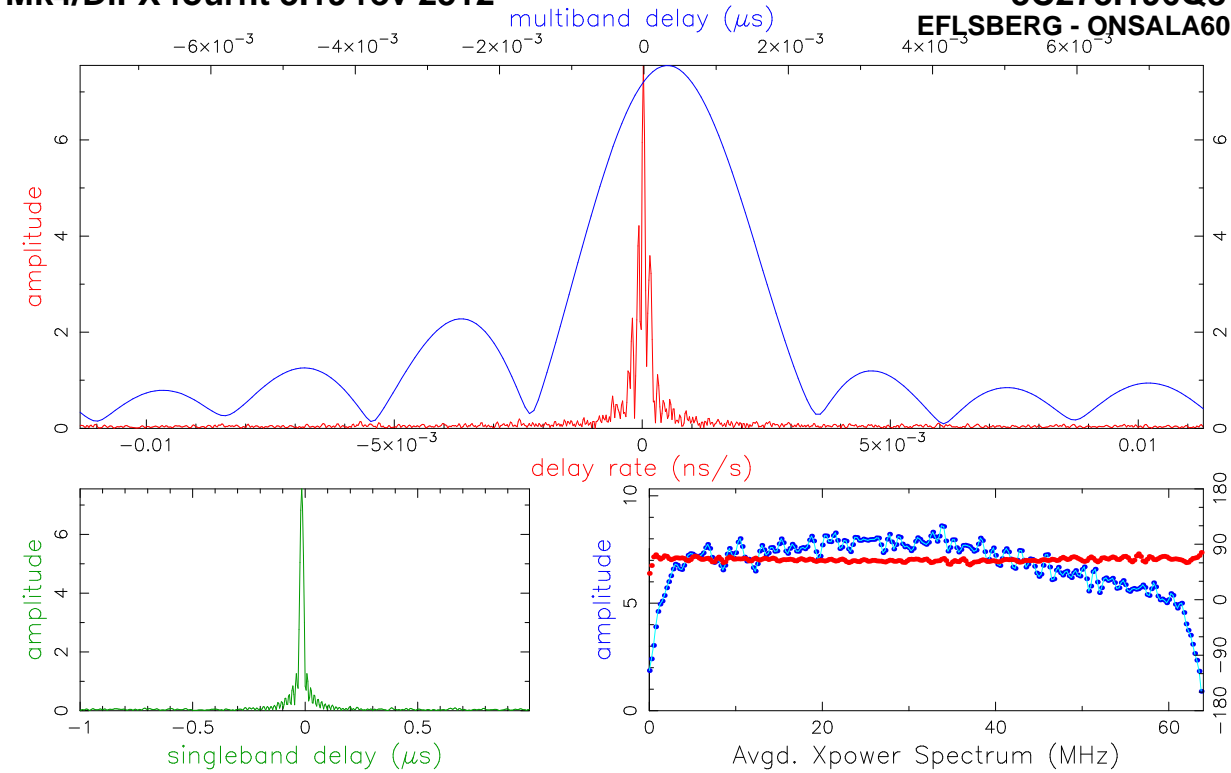
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 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 | | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| B:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| B:p | 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 | | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | | |
| p | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | | |
| Group delay (usec)(sbd) | | 3.17300266514E+03 | | | 3.17352368527E+03 | | | | Resid mbdelay (usec) | -5.39513E-03 | +/- 1.9E-04 |
| Sband delay (usec) | | 3.17300586302E+03 | | | -4.2874489E+00 | | | | Resid sbdelay (usec) | -5.17822E-01 | +/- 1.5E-03 |
| Phase delay (usec) | | 3.17352368958E+03 | | | -4.0399999E-07 | | | | Resid phdelay (usec) | 4.30410E-06 | +/- 6.4E-07 |
| Delay rate (us/s) | | -1.90874463331E+00 | | | -1.90874857793E+00 | | | | Resid rate (us/s) | 3.94462E-06 | +/- 6.1E-09 |
| Total phase (deg) | | | 223.2 | | | | | | Resid phase (deg) | 133.5 | +/- 19.8 |

| | RMS | Theor. | Amplitude | 0.166 +/- 0.029 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 40.6 | 46.4 | Search (1024X32) | 0.154 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 53.7 | 81.0 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 31.7 | 28.0 | Inc. seg. avg. | 0.151 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 28.5 | 48.9 | Inc. frq. avg. | 0.158 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

B: az 234.2 el 28.0 pa 31.1 p: az 100.4 el 18.2 pa -54.4 u,v (fr/asec) 10930.153 1796.754 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Bp..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Bp.W.95.196Q8V

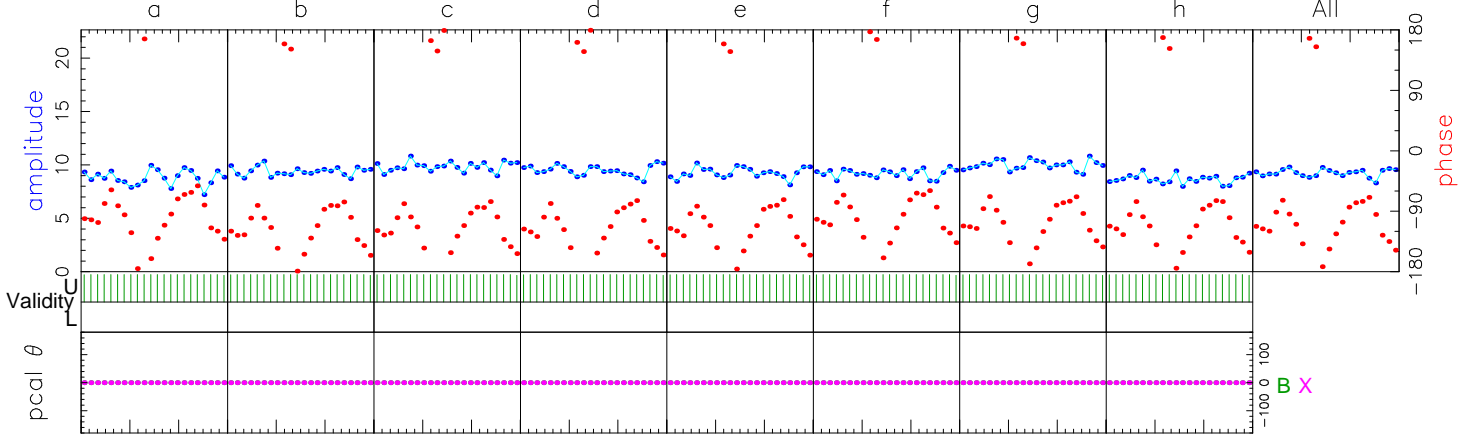


Fringe quality 6

SNR 277.0
Int time 179.931
Amp 7.551
Phase -116.7
PFD 0.0e+00
Delays (us)
SBD -0.015404
MBD 0.000332
Fringe rate (Hz) 0.000969
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153434
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



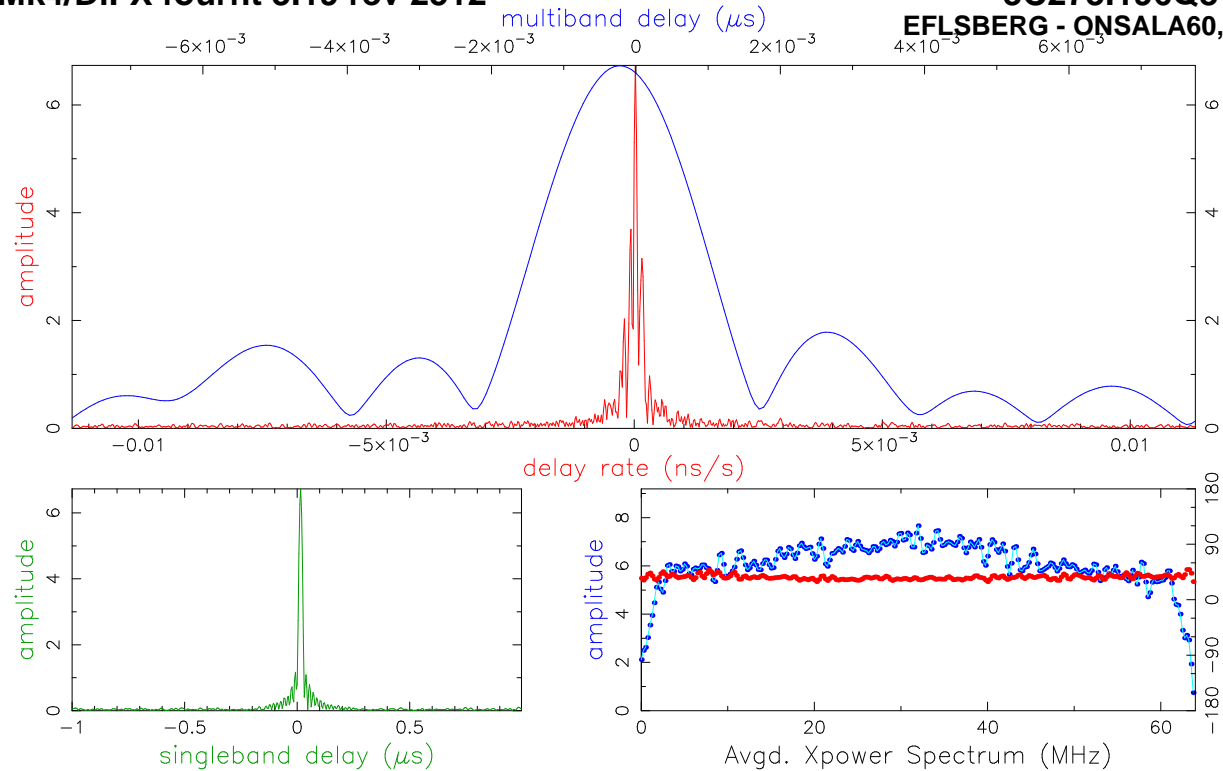
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|--------|
| | -102.8 | -122.6 | -122.7 | -123.7 | -121.2 | -106.3 | -113.7 | -119.4 | Phase | -116.7 |
| | 7.2 | 7.6 | 8.1 | 7.7 | 7.5 | 7.5 | 8.2 | 7.1 | Ampl. | 7.6 |
| | 253.1 | 252.5 | 253.3 | 253.0 | 253.3 | 253.0 | 253.1 | 252.6 | Sbd box | 253.1 |
| 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 | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:X | 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 | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| X | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 2.10779122896E+03 | Apriori delay (usec) | 2.10780652223E+03 | Resid mbdelay (usec) | 3.31737E-04 | +/- | 3.9E-06 |
| Sband delay (usec) | 2.10779111798E+03 | Apriori clock (usec) | -2.7818235E+01 | Resid sbdelay (usec) | -1.54042E-02 | +/- | 3.1E-05 |
| Phase delay (usec) | 2.10780651847E+03 | Apriori clockrate (us/s) | -7.2800002E-07 | Resid phdelay (usec) | -3.76258E-06 | +/- | 1.3E-08 |
| Delay rate (us/s) | -5.97915437813E-02 | Apriori rate (us/s) | -5.97915550275E-02 | Resid rate (us/s) | 1.12462E-08 | +/- | 1.3E-10 |
| Total phase (deg) | 180.2 | Apriori accel (us/s/s) | -1.16259476494E-05 | Resid phase (deg) | -116.7 | +/- | 0.4 |

| | | | | | | | | |
|--------------|----------|------------|---------------------------|----------------------------------------|-----------------------|-------------------|--------|-------|
| ph/seg (deg) | RMS 36.8 | Theor. 1.0 | Amplitude 7.551 +/- 0.027 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
| amp/seg (%) | 23.1 | 1.7 | Search (1024X32) 7.084 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 8.8 | 0.6 | Interp. 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| amp/frq (%) | 4.7 | 1.0 | Inc. seg. avg. 9.255 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| | | | Inc. frq. avg. 7.613 | Data rate(Mb/s): 2048 | nlags: 256 | t_cohere infinite | | |

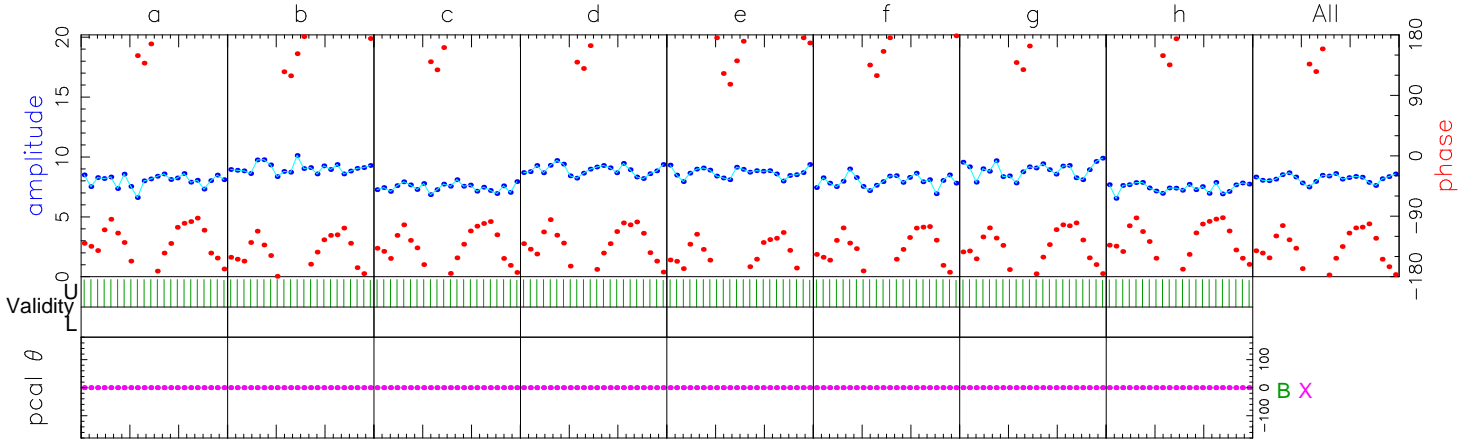
B: az 234.2 el 28.0 pa 31.1 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 336.518 -656.839 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BX.W.23.196Q8V



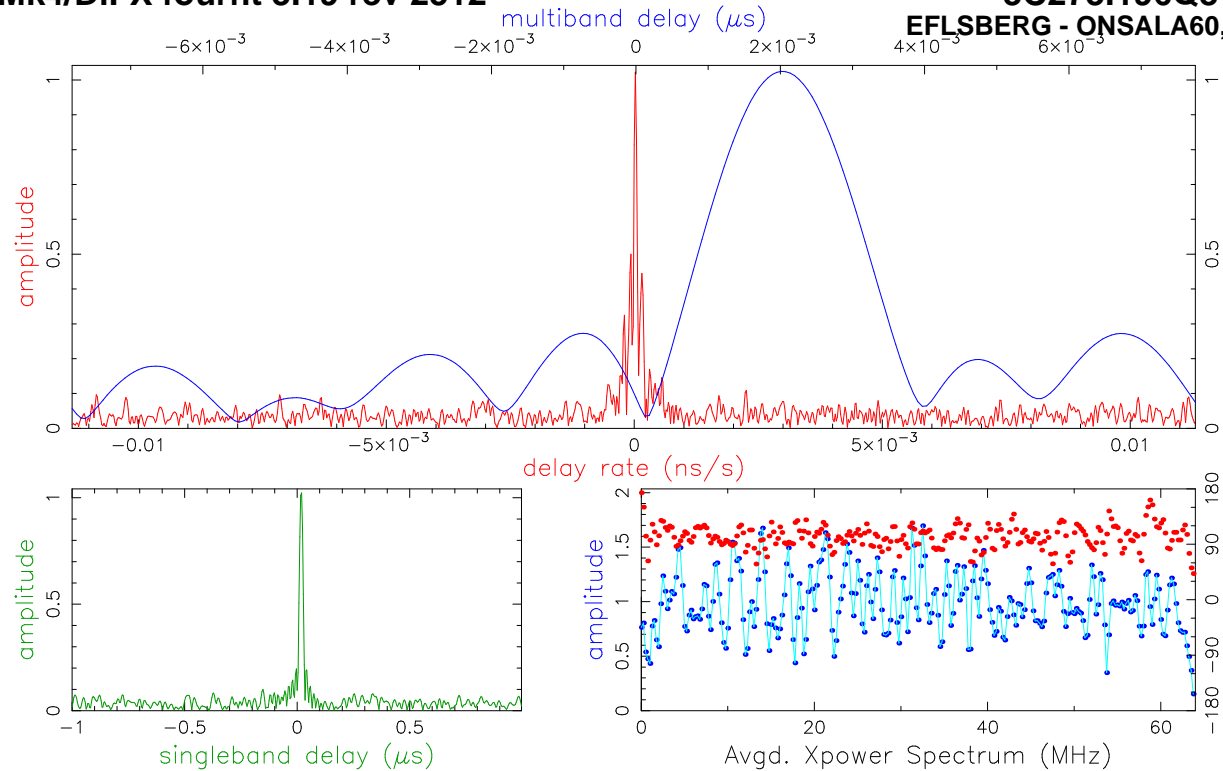
Fringe quality 6
 SNR 247.0
 Int time 179.931
 Amp 6.732
 Phase -145.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.015186
 MBD -0.000236
 Fringe rate (Hz)
 0.000976
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153436
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



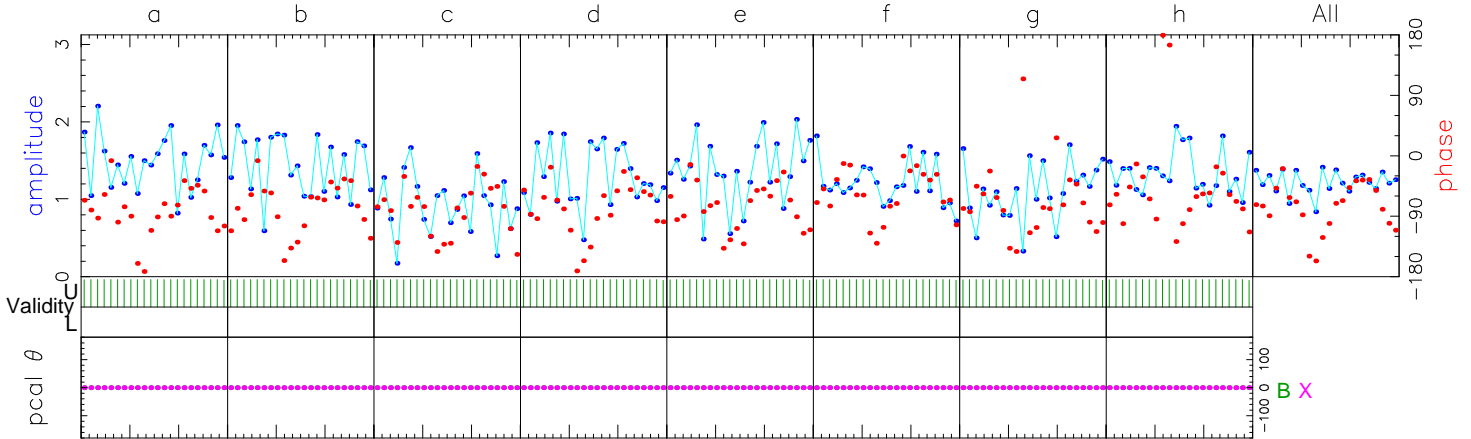
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -136.6 | -155.2 | -143.8 | -139.6 | -161.3 | -150.0 | -144.7 | -134.1 | Phase | -145.9 |
| | 6.6 | 7.4 | 6.1 | 7.3 | 7.1 | 6.5 | 7.3 | 6.1 | Ampl. | 6.8 |
| | 260.4 | 260.7 | 261.3 | 260.7 | 260.8 | 261.3 | 261.2 | 260.4 | Sbd box | 260.9 |
| 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 | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:X | 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 | PC amp | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| X | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 2.10782191131E+03 | | Apriori delay (usec) | | 2.10780652223E+03 | | Resid mbdelay (usec) | | -2.35919E-04 | +/- 4.4E-06 |
| Sband delay (usec) | 2.10782170873E+03 | | Apriori clock (usec) | | -2.7818235E+01 | | Resid sbdelay (usec) | | 1.51865E-02 | +/- 3.5E-05 |
| Phase delay (usec) | 2.10780651752E+03 | | Apriori clockrate (us/s) | | -7.2800002E-07 | | Resid phdelay (usec) | | -4.70588E-06 | +/- 1.5E-08 |
| Delay rate (us/s) | -5.97915437019E-02 | | Apriori rate (us/s) | | -5.97915550275E-02 | | Resid rate (us/s) | | 1.13256E-08 | +/- 1.4E-10 |
| Total phase (deg) | 151.0 | | Apriori accel (us/s/s) | | -1.16259476494E-05 | | Resid phase (deg) | | -145.9 | +/- 0.5 |

ph/seg (deg) 36.6 1.1 Search (1024X32) 6.256 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 22.4 1.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.1 0.7 Inc. seg. avg. 8.207 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 7.6 1.1 Inc. frq. avg. 6.803 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 234.2 el 28.0 pa 31.1 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 336.518 -656.839 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BX.W.32.196Q8V



Fringe quality 8
SNR 38.2
Int time 179.931
Amp 1.042
Phase -74.1
PFD 0.0e+00
Delays (us)
SBD 0.017807
MBD 0.001968
Fringe rate (Hz) 0.001041
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153438
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

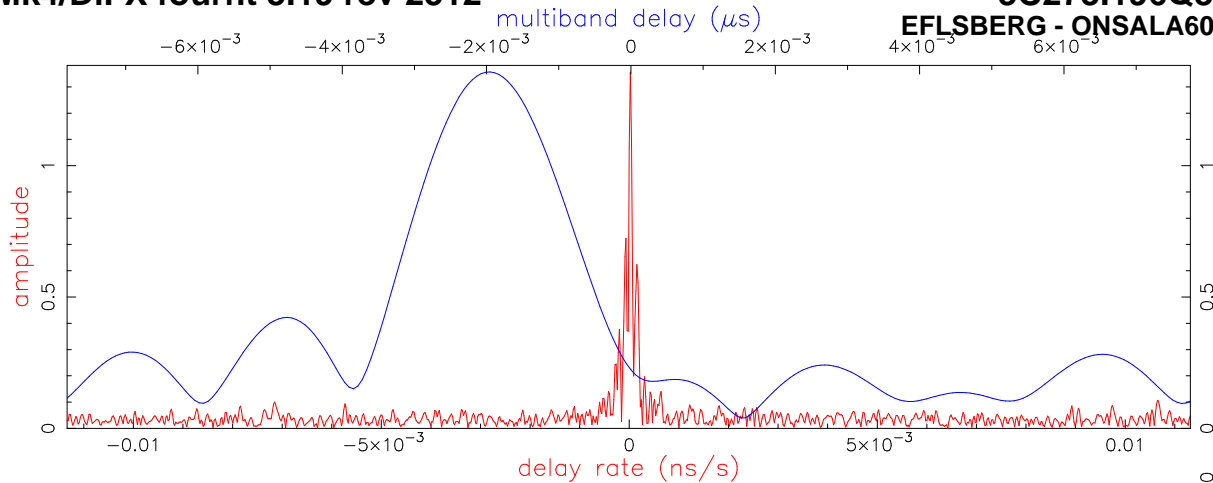
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| | -82.9 | -77.9 | -75.8 | -72.5 | -73.6 | -53.0 | -79.9 | -75.0 | Phase | -74.1 |
| | 1.3 | 1.1 | 0.7 | 1.1 | 1.2 | 1.0 | 0.9 | 1.0 | Ampl. | 1.0 |
| | 261.7 | 261.3 | 261.2 | 261.8 | 261.7 | 262.0 | 261.0 | 261.1 | Sbd box | 261.6 |
| 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 | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:X | 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 | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| X | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |

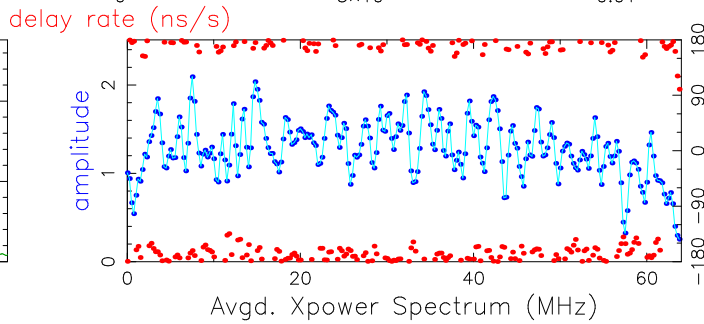
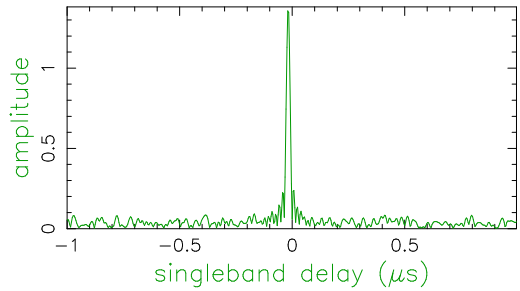
| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 2.10782411487E+03 | Apriori delay (usec) | 2.10780652223E+03 | Resid mbdelay (usec) | 1.96764E-03 | +/- | 2.8E-05 |
| Sband delay (usec) | 2.10782432948E+03 | Apriori clock (usec) | -2.7818235E+01 | Resid sbdelay (usec) | 1.78073E-02 | +/- | 2.3E-04 |
| Phase delay (usec) | 2.10780651984E+03 | Apriori clockrate (us/s) | -7.2800002E-07 | Resid phdelay (usec) | -2.38843E-06 | +/- | 9.7E-08 |
| Delay rate (us/s) | -5.97915429480E-02 | Apriori rate (us/s) | -5.97915550275E-02 | Resid rate (us/s) | 1.20795E-08 | +/- | 9.3E-10 |
| Total phase (deg) | 222.8 | Apriori accel (us/s/s) | -1.16259476494E-05 | Resid phase (deg) | -74.1 | +/- | 3.0 |

| | | | | | | | | | |
|--------------|----------|------------|----------------------------|-------|----------------------------------------|----------------------------|------------------|--------|-------|
| ph/seg (deg) | RMS 35.3 | Theor. 7.0 | Amplitude Search (1024X32) | 0.977 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
| amp/seg (%) | 22.0 | 12.3 | Interp. | 0.000 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 9.8 | 4.2 | Inc. seg. avg. | 1.212 | Bits/sample: 2x2 | Sample rate(MISamp/s): 128 | dr window (ns/s) | -0.011 | 0.011 |
| amp/frq (%) | 14.5 | 7.4 | Inc. frq. avg. | 1.031 | Data rate(Mb/s): 2048 | nlags: 256 | ion window (TEC) | 0.00 | 0.00 |



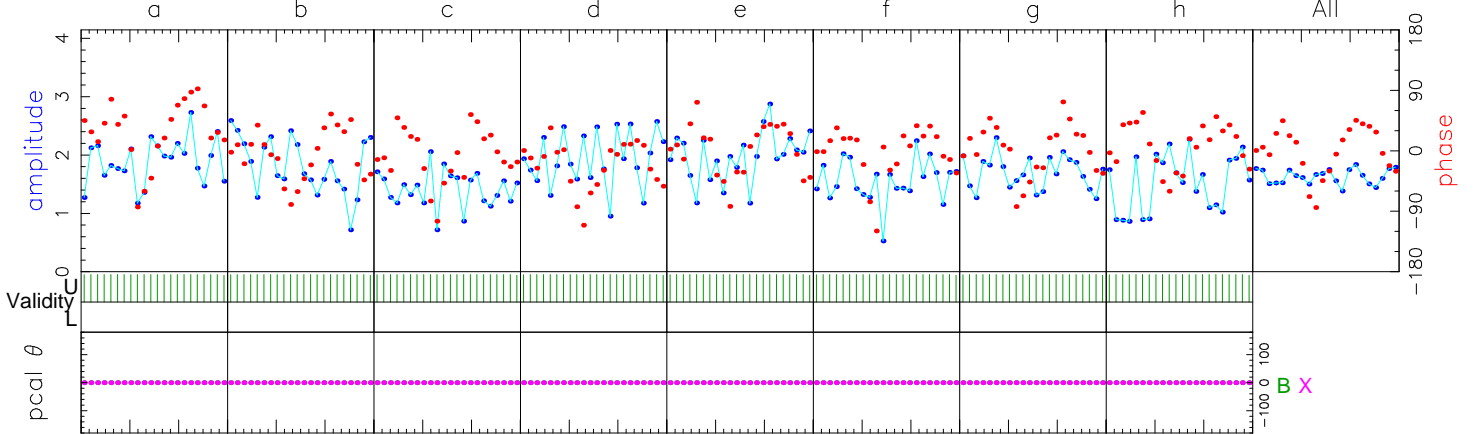
Fringe quality 5

SNR 50.7
Int time 179.931
Amp 1.382
Phase 1.2
PFD 0.0e+00
Delays (us)
SBD -0.017744
MBD -0.001916
Fringe rate (Hz)
0.000992
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201e
Yr:day 16383
Start 2020:206:020932
Stop 2020:206:153439
FRT 2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

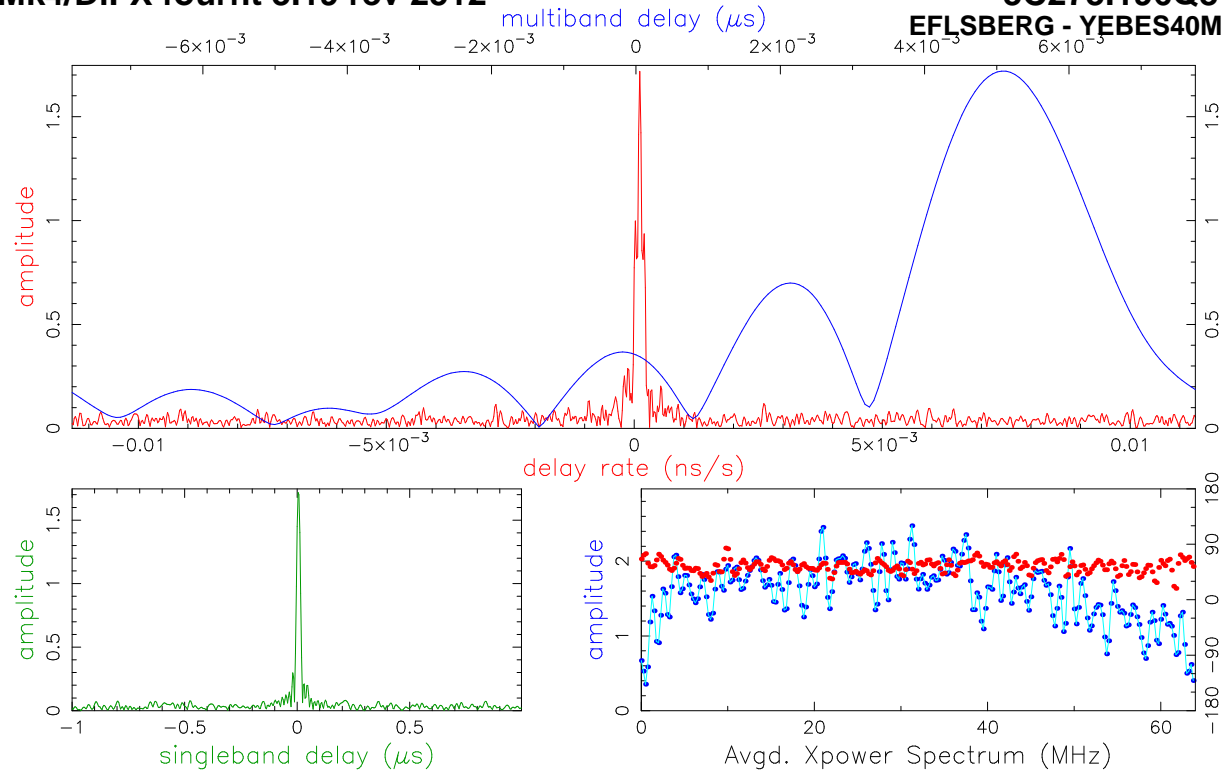
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 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 | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:X | 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 | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| X | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | 2.10778898118E+03 | | Apriori delay (usec) | | 2.10780652223E+03 | | Resid mbdelay (usec) | | -1.91604E-03 | +/- 2.1E-05 |
| Sband delay (usec) | 2.10778877798E+03 | | Apriori clock (usec) | | -2.7818235E+01 | | Resid sbdelay (usec) | | -1.77443E-02 | +/- 1.7E-04 |
| Phase delay (usec) | 2.10780652227E+03 | | Apriori clockrate (us/s) | | -7.2800002E-07 | | Resid phdelay (usec) | | 3.74405E-08 | +/- 7.3E-08 |
| Delay rate (us/s) | -5.97915435148E-02 | | Apriori rate (us/s) | | -5.97915550275E-02 | | Resid rate (us/s) | | 1.15126E-08 | +/- 7.0E-10 |
| Total phase (deg) | 298.1 | | Apriori accel (us/s/s) | | -1.16259476494E-05 | | Resid phase (deg) | | 1.2 | +/- 2.3 |

| | RMS | Theor. | Amplitude | 1.382 +/- 0.027 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | |
|--------------|------|--------|------------------|-----------------|----------------------------------------|-------------------------------|-----------------------------|
| ph/seg (deg) | 35.0 | 5.3 | Search (1024X32) | 1.293 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 | |
| amp/seg (%) | 20.3 | 9.3 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 17.6 | 3.2 | Inc. seg. avg. | 1.627 | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 | |
| amp/frq (%) | 11.6 | 5.6 | Inc. frq. avg. | 1.405 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) 0.00 0.00 |

B: az 234.2 el 28.0 pa 31.1 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 336.518 -656.839 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BX.W.53.196Q8V

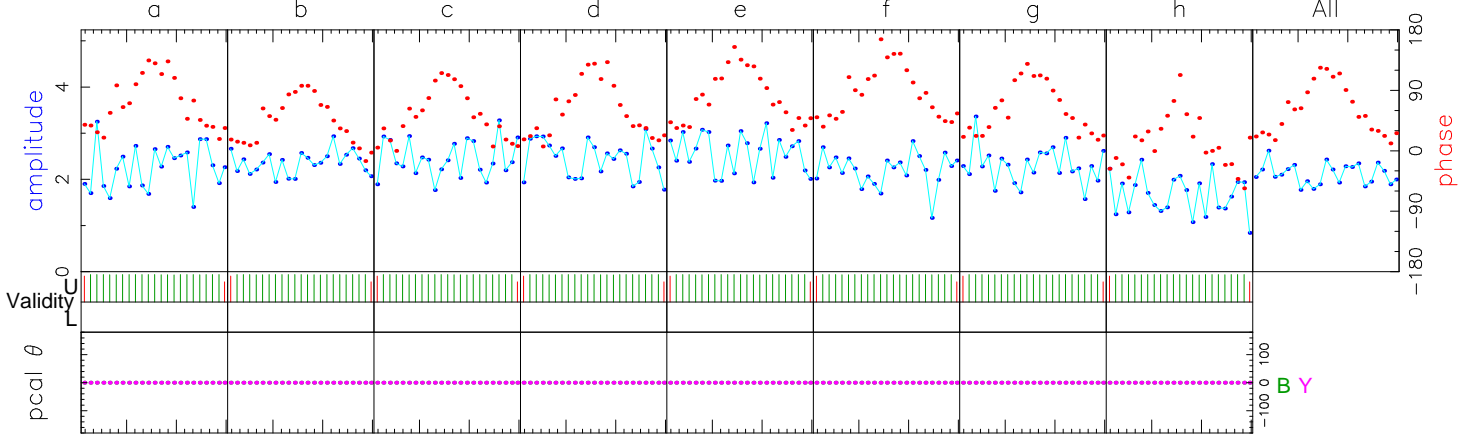


Fringe quality 4

SNR 62.9
Int time 173.429
Amp 1.746
Phase 58.8
PFD 0.0e+00
Delays (us)
SBD 0.005609
MBD 0.005136
Fringe rate (Hz)
0.009105
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Yr:day 16383
2020:206:020932
2020:206:153435
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



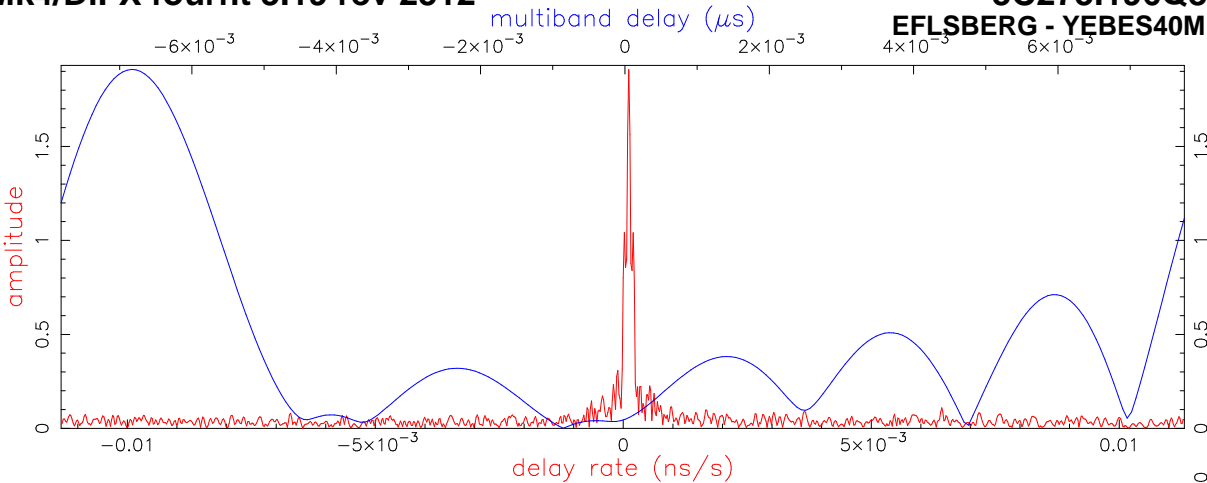
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:Y | 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 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Y | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|-------------|-----|---------|
| Group delay (usec)(sbd) | -3.59359136450E+03 | Apriori delay (usec) | -3.59359650084E+03 | Resid mbdelay (usec) | 5.13634E-03 | +/- | 1.7E-05 |
| Sband delay (usec) | -3.59359089209E+03 | Apriori clock (usec) | 1.0300179E+00 | Resid sbdelay (usec) | 5.60875E-03 | +/- | 1.4E-04 |
| Phase delay (usec) | -3.59359649894E+03 | Apriori clockrate (us/s) | -4.2000000E-07 | Resid phdelay (usec) | 1.89479E-06 | +/- | 5.9E-08 |
| Delay rate (us/s) | -1.53993063588E-02 | Apriori rate (us/s) | -1.53994120642E-02 | Resid rate (us/s) | 1.05705E-07 | +/- | 5.8E-10 |
| Total phase (deg) | -150.9 | Apriori accel (us/s/s) | 1.95811571103E-05 | Resid phase (deg) | 58.8 | +/- | 1.8 |

| | | | | | | | | | | |
|--------------|----------|------------|----------------------------|-----------------|-----------------------------|---------------------------|-----------------------|------------------|--------|-------|
| ph/seg (deg) | RMS 36.6 | Theor. 4.4 | Amplitude Search (1024X32) | 1.746 +/- 0.028 | 1.675 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
| amp/seg (%) | 24.8 | 7.6 | Interp. | 0.000 | 0.000E+00, 0.000E+00 (us/s) | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 | |
| ph/frq (deg) | 25.7 | 2.6 | Inc. seg. avg. | 2.114 | Sample rate(MISamp/s): 128 | nlags: 256 | t_cohere infinite | dr window (ns/s) | -0.011 | 0.011 |
| amp/frq (%) | 13.8 | 4.5 | Inc. frq. avg. | 1.826 | Data rate(Mb/s): 2048 | ion window (TEC) | 0.00 | 0.00 | | |

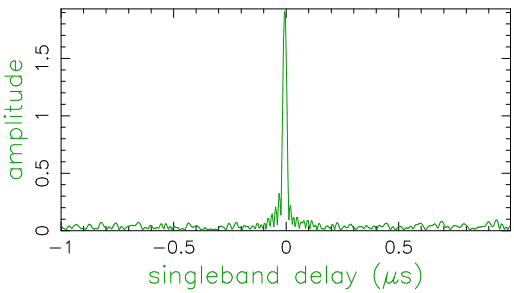
B: az 234.2 el 28.0 pa 31.1 Y: az 229.4 el 39.6 pa 35.3 u,v (fr/asec) 98.543 1134.434 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BY..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BY.W.28.196Q8V

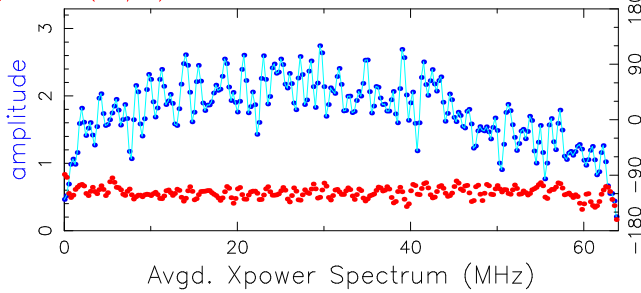


Fringe quality 5

SNR 69.6
Int time 173.429
Amp 1.931
Phase -114.3
PFD 0.0e+00
Delays (us)
SBD -0.006338
MBD -0.006788
Fringe rate (Hz)
0.009145
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

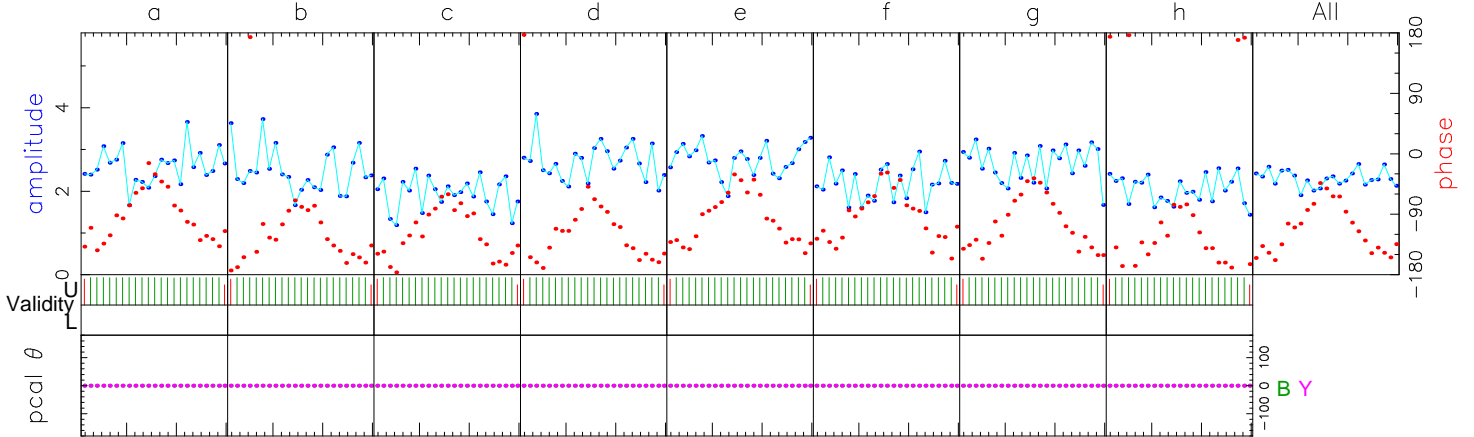


delay rate (ns/s)



Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004005.12
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153437
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

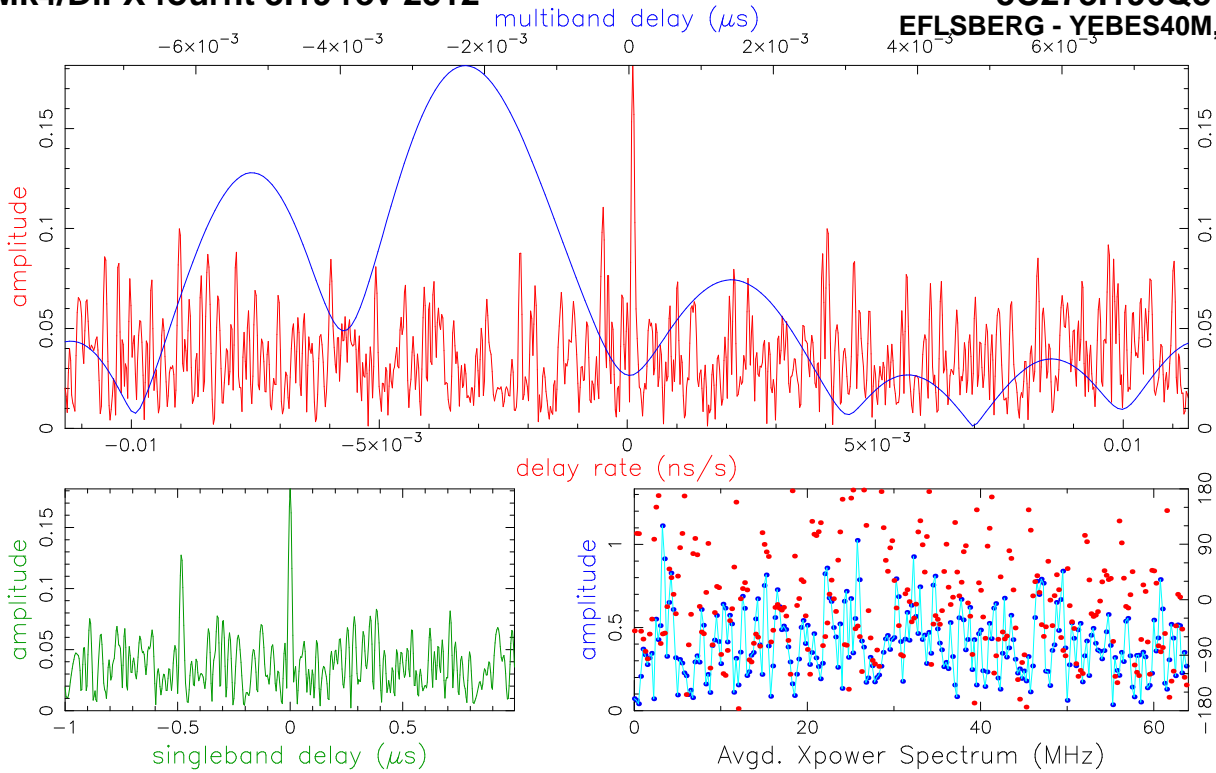
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -97.1 | -131.0 | -118.9 | -125.6 | -100.1 | -96.3 | -106.7 | -143.2 | Phase | -114.3 |
| | 2.1 | 2.1 | 1.6 | 2.2 | 2.2 | 1.8 | 2.1 | 1.7 | Ampl. | 2.0 |
| | 255.2 | 254.8 | 255.6 | 255.3 | 255.4 | 255.6 | 255.2 | 254.0 | Sbd box | 255.4 |
| U/L | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | APs used | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:Y | 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 | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| Y | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -3.59360328903E+03 | | Apriori delay (usec) | | -3.59359650084E+03 | | Resid mbdelay (usec) | | -6.78819E-03 | +/- 1.6E-05 |
| Sband delay (usec) | -3.59360283909E+03 | | Apriori clock (usec) | | 1.0300179E+00 | | Resid sbdelay (usec) | | -6.33825E-03 | +/- 1.2E-04 |
| Phase delay (usec) | -3.59359650452E+03 | | Apriori clockrate (us/s) | | -4.2000000E-07 | | Resid phdelay (usec) | | -3.68483E-06 | +/- 5.3E-08 |
| Delay rate (us/s) | -1.53993059010E-02 | | Apriori rate (us/s) | | -1.53994120642E-02 | | Resid rate (us/s) | | 1.06163E-07 | +/- 5.3E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 1.95811571103E-05 | | Resid phase (deg) | | -114.3 | +/- 1.6 |

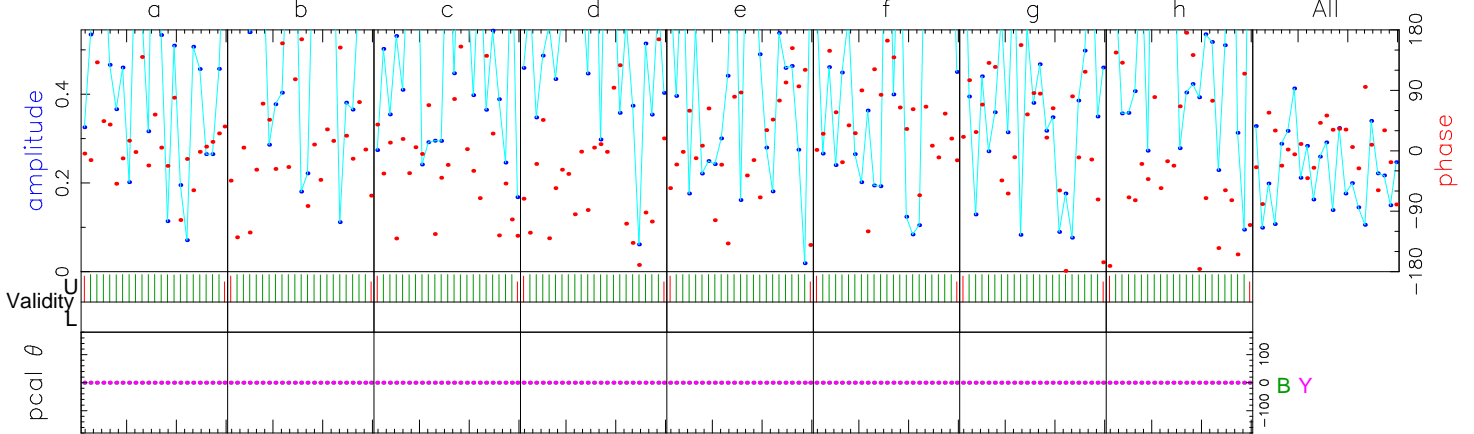
| | RMS | Theor. | Amplitude | 1.931 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 35.3 | 4.0 | Search (1024X32) | 1.892 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 22.0 | 6.9 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 18.9 | 2.3 | Inc. seg. avg. | 2.306 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 12.8 | 4.1 | Inc. frq. avg. | 1.984 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

B: az 234.2 el 28.0 pa 31.1 Y: az 229.4 el 39.6 pa 35.3 u,v (fr/asec) 98.543 1134.434 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BY..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BY.W.40.196Q8V



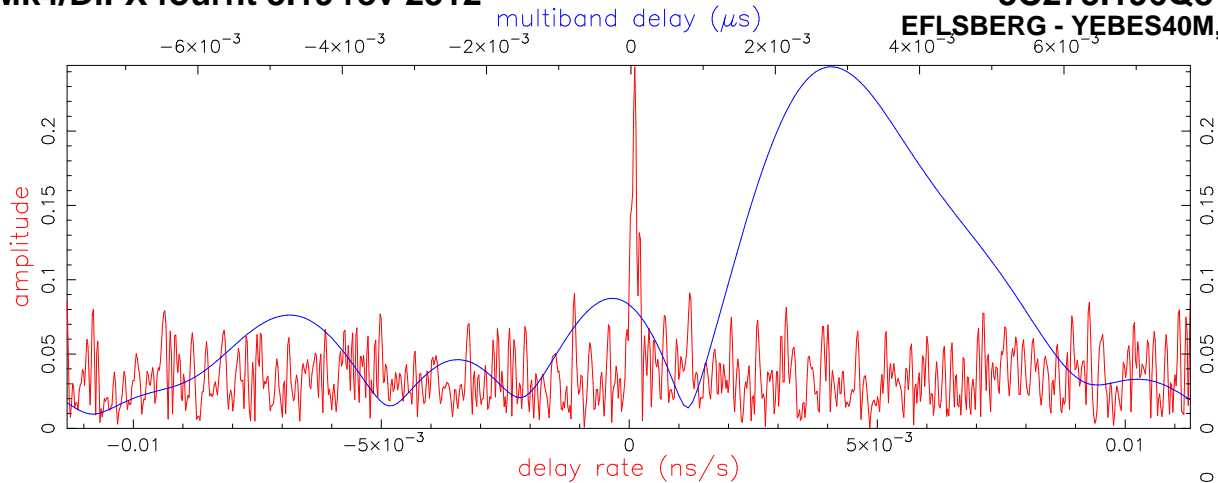
Fringe quality 0
SNR 6.5
Int time 173.429
Amp 0.182
Phase 2.7
PFD 8.5e-03
Delays (us)
SBD -0.000326
MBD -0.002260
Fringe rate (Hz) 0.009654
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004005.12
Stop 004300.22
FRT 004130.00
Corr/FF/build 2020:206:020932
2020:206:153439
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

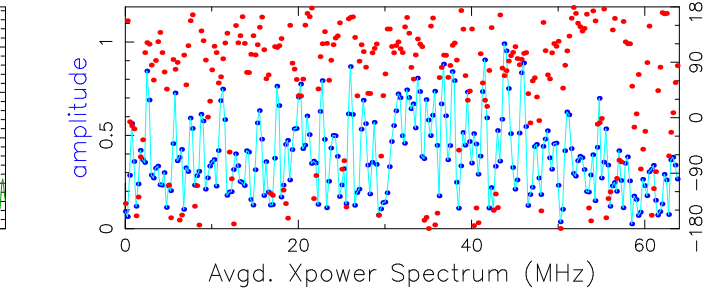
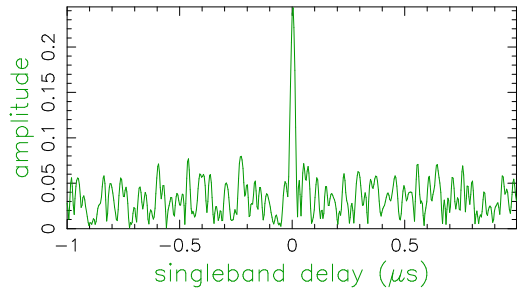


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|------------------|-----------------|----------|----------|----------|----------|----------------------------------------|-------------------------------|
| U/L | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | | 256.9 |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | APs used | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:Y | 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 | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| Y | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| Group delay (usec)(sbd) | -3.59359876125E+03 | | | | | | | | Resid mbdelay (usec) | -2.26041E-03 +/- 1.7E-04 |
| Sband delay (usec) | -3.59359682659E+03 | | | | | | | | Resid sbdelay (usec) | -3.25750E-04 +/- 1.3E-03 |
| Phase delay (usec) | -3.59359650075E+03 | | | | | | | | Resid phdelay (usec) | 8.68024E-08 +/- 5.6E-07 |
| Delay rate (us/s) | -1.53992999917E-02 | | | | | | | | Resid rate (us/s) | 1.12073E-07 +/- 5.6E-09 |
| Total phase (deg) | | -206.9 | | | | | | | Resid phase (deg) | 2.7 +/- 17.5 |
| | RMS | Theor. | Amplitude | 0.182 +/- 0.028 | | | | | PCal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| ph/seg (deg) | 42.2 | 42.0 | Search (1024X32) | 0.179 | | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 52.6 | 73.3 | Interp. | 0.000 | | | | | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 43.7 | 24.8 | Inc. seg. avg. | 0.179 | | | | | Sample rate(MSamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 38.0 | 43.2 | Inc. frq. avg. | 0.201 | | | | | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |

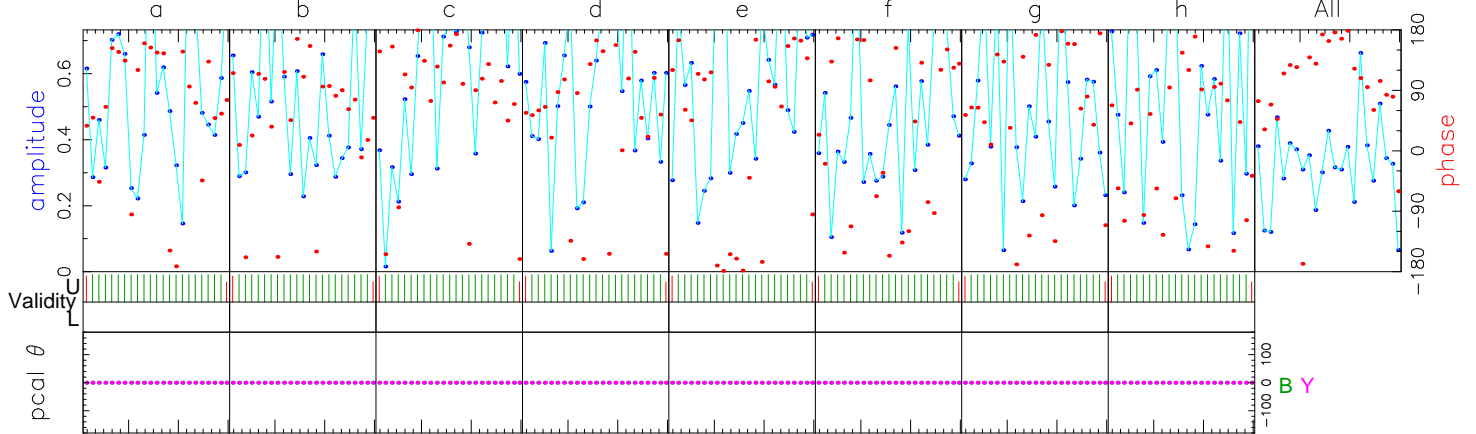
B: az 234.2 el 28.0 pa 31.1 Y: az 229.4 el 39.6 pa 35.3 u,v (fr/asec) 98.543 1134.434 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BY..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BY.W.52.196Q8V



Fringe quality 9
SNR 8.8
Int time 173.429
Amp 0.244
Phase 118.2
PFD 2.7e-10
Delays (us)
SBD 0.002873
MBD 0.002736
Fringe rate (Hz) 0.008672
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004005.12
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153442
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



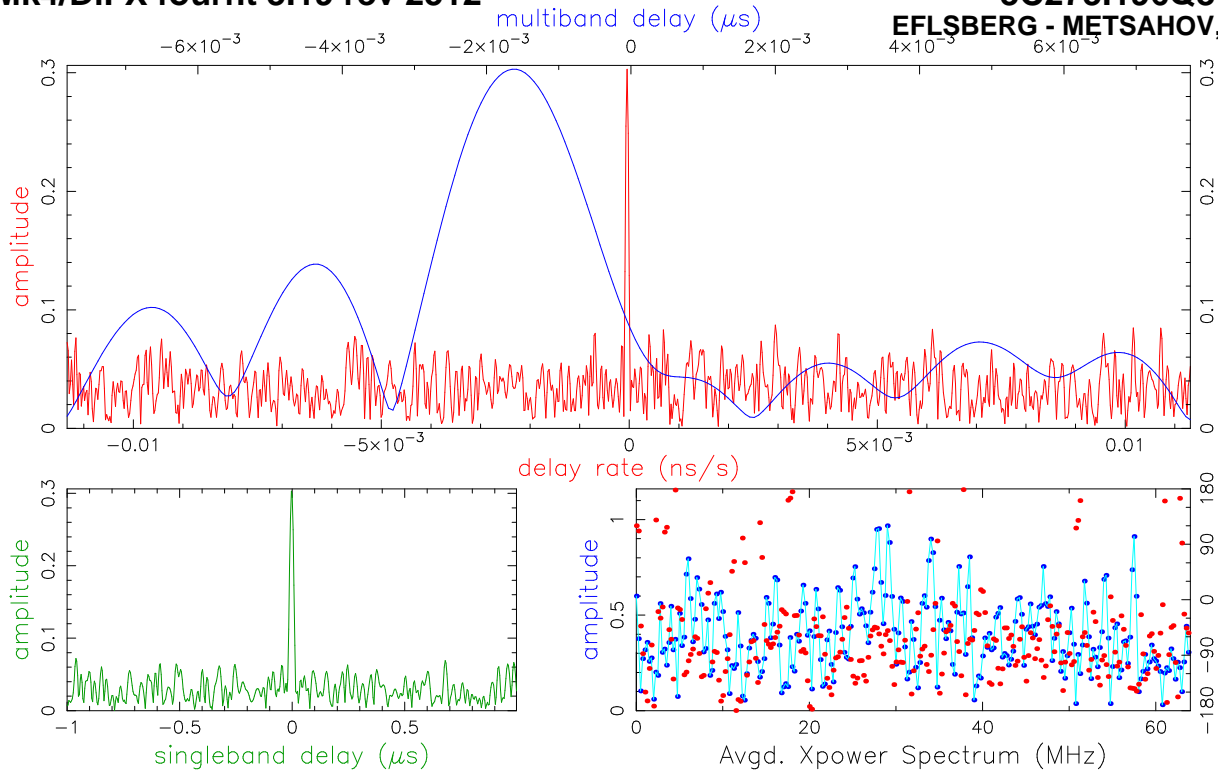
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|-------------|-------------|
| | 116.9 | 92.9 | 116.7 | 114.5 | 150.5 | 171.1 | 115.7 | 50.6 | Phase | 118.2 |
| | 0.3 | 0.3 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | Ampl. | 0.3 |
| | 257.6 | 257.3 | 258.2 | 256.2 | 258.2 | 183.7 | 62.4 | 215.3 | Sbd box | 257.7 |
| U/L | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | 342/0 | APs used | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:Y | 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 | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| Y | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -3.59359376460E+03 | | Apriori delay (usec) | | -3.59359650084E+03 | | Resid mbdelay (usec) | | 2.73624E-03 | +/- 1.2E-04 |
| Sband delay (usec) | -3.59359362834E+03 | | Apriori clock (usec) | | 1.0300179E+00 | | Resid sbdelay (usec) | | 2.87250E-03 | +/- 9.8E-04 |
| Phase delay (usec) | -3.59359649703E+03 | | Apriori clockrate (us/s) | | -4.2000000E-07 | | Resid phdelay (usec) | | 3.81301E-06 | +/- 4.2E-07 |
| Delay rate (us/s) | -1.53993113895E-02 | | Apriori rate (us/s) | | -1.53994120642E-02 | | Resid rate (us/s) | | 1.00675E-07 | +/- 4.2E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 1.95811571103E-05 | | Resid phase (deg) | | 118.2 | +/- 13.0 |

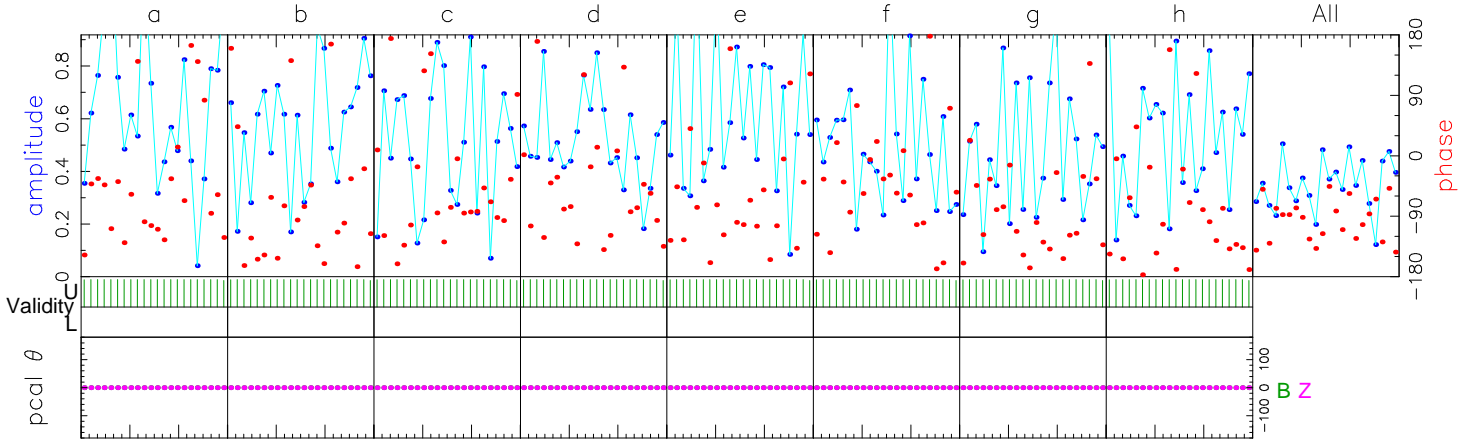
| | RMS | Theor. | Amplitude | 0.244 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|-------------------------------|
| ph/seg (deg) | 54.5 | 31.2 | Search (1024X32) | 0.233 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 62.4 | 54.5 | Interp. | 0.000 | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 38.9 | 18.4 | Inc. seg. avg. | 0.286 | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 40.8 | 32.2 | Inc. frq. avg. | 0.262 | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |

B: az 234.2 el 28.0 pa 31.1 Y: az 229.4 el 39.6 pa 35.3 u,v (fr/asec) 98.543 1134.434 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BY..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BY.W.66.196Q8V



Fringe quality 9
SNR 11.2
Int time 179.635
Amp 0.306
Phase -94.8
PFD 7.4e-21
Delays (us)
SBD -0.002419
MBD -0.001586
Fringe rate (Hz)
-0.003241
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153449
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

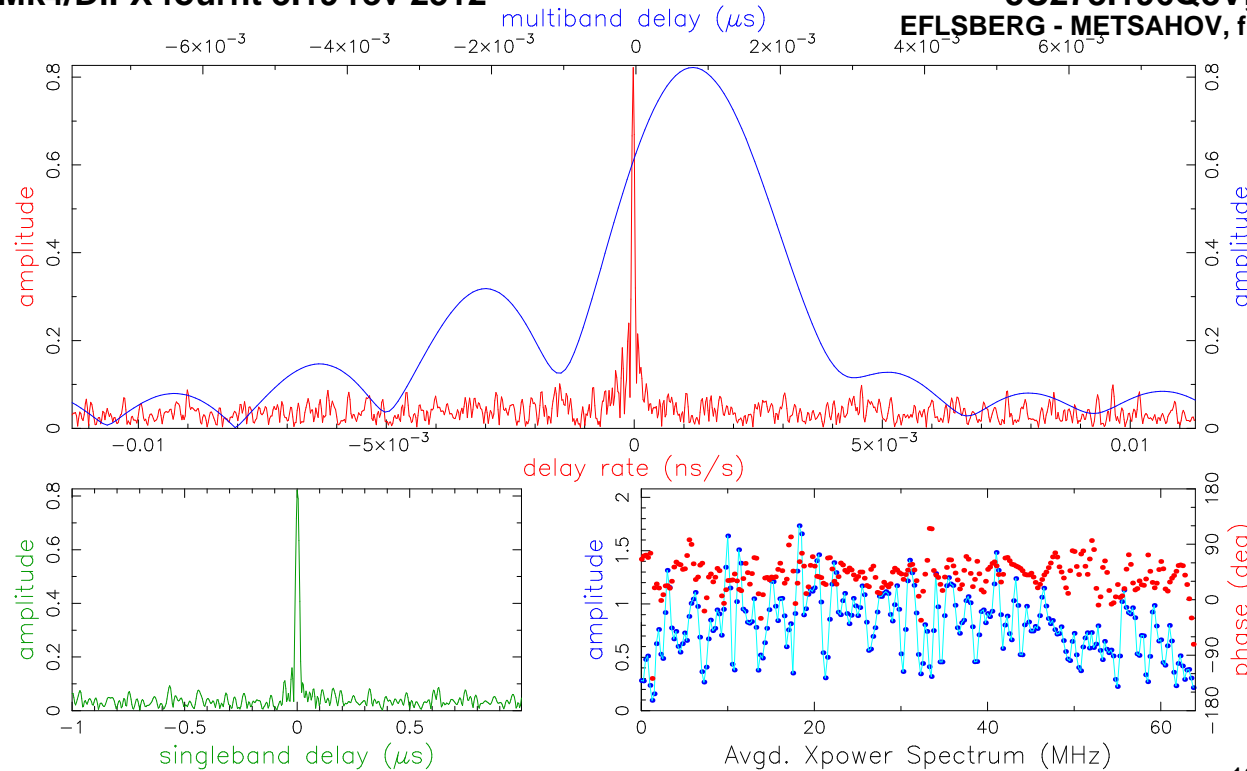


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| | -81.5 | -123.8 | -102.3 | -81.2 | -85.2 | -61.2 | -93.8 | -124.6 | Phase | -94.8 |
| | 0.4 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | Ampl. | 0.3 |
| | 255.3 | 256.9 | 255.9 | 256.9 | 256.8 | 254.4 | 312.7 | 255.9 | Sbd box | 256.4 |
| 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 | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:Z | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:Z | 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 | PC amp | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| Z | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 4.62994252208E+03 | Apriori delay (usec) | 4.62994410787E+03 | Resid mbdelay (usec) | -1.58579E-03 | +/- | 9.7E-05 |
| Sband delay (usec) | 4.62994168912E+03 | Apriori clock (usec) | 1.3136809E+01 | Resid sbdelay (usec) | -2.41875E-03 | +/- | 7.7E-04 |
| Phase delay (usec) | 4.62994410481E+03 | Apriori clockrate (us/s) | -2.160000E-07 | Resid phdelay (usec) | -3.05736E-06 | +/- | 3.3E-07 |
| Delay rate (us/s) | -2.05203358522E-02 | Apriori rate (us/s) | -2.05202982264E-02 | Resid rate (us/s) | -3.76258E-08 | +/- | 3.2E-09 |
| Total phase (deg) | 67.8 | Apriori accel (us/s/s) | -2.49166617671E-05 | Resid phase (deg) | -94.8 | +/- | 10.2 |

| | | | | | | | | | | |
|--------------|------|------------------|-------|----------------|-----------------|------------------------|-----------------------------|----------------------|----------------|--------------|
| ph/seg (deg) | 30.8 | Theor. | 23.9 | Amplitude | 0.306 +/- 0.027 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | |
| amp/seg (%) | 35.2 | Search (1024X32) | 0.296 | Interp. | 0.000 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 1.000 | |
| ph/frq (deg) | 23.7 | Inc. seg. avg. | 0.323 | Inc. frq. avg. | 0.313 | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| amp/frq (%) | 20.3 | Inc. frq. avg. | 0.313 | | | Sample rate (MSamp/s): | 128 | dr window (ns/s) | -0.011 0.011 | |
| | | | | | | Data rate (Mb/s): | 2048 | ion window (TEC) | 0.00 0.00 | |

B: az 234.2 el 28.0 pa 31.1 Z: az 247.3 el 14.6 pa 27.3 u,v (fr/asec) 104.624 -918.830 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BZ..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BZ.W.110.196Q8V

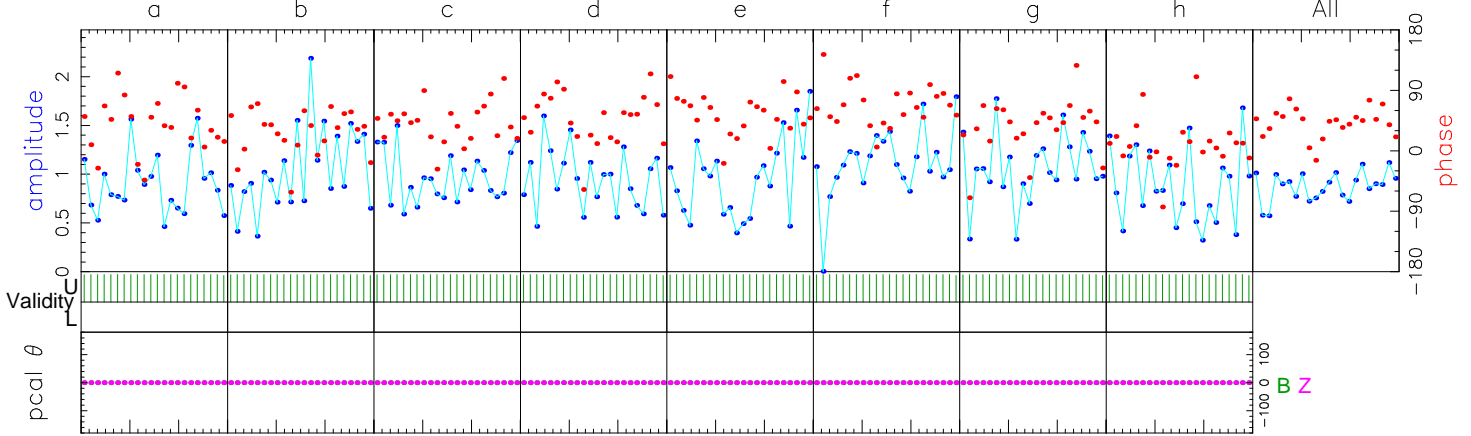


Fringe quality 8

SNR 30.3
Int time 179.635
Amp 0.827
Phase 43.2
PFD 0.0e+00
Delays (us)
SBD 0.001041
MBD 0.000809
Fringe rate (Hz)
-0.002718
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153440
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

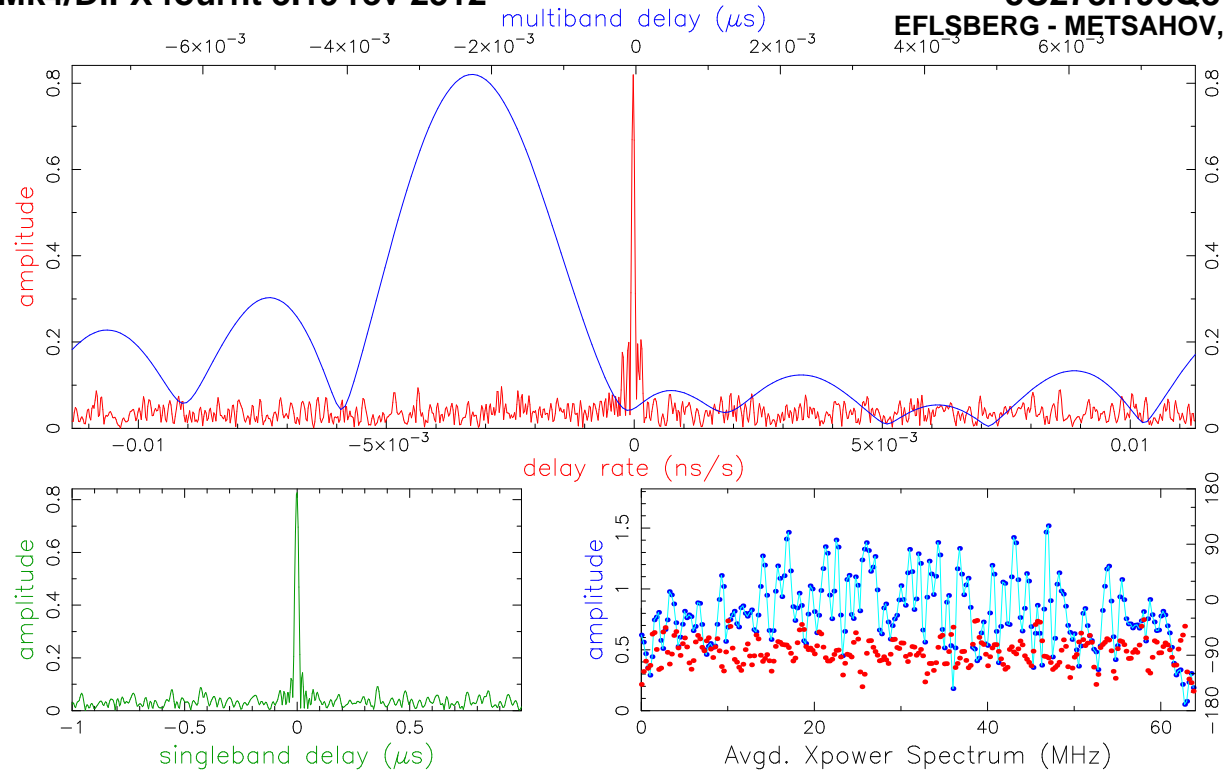


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | 257.3 |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | 43.2 |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | 0.9 |
| B:Z | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | 257.3 |
| B:Z | 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 | | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Z | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | 4.62994491735E+03 | | Apriori delay (usec) | | 4.62994410787E+03 | | Resid mbdelay (usec) | | 8.09482E-04 | +/- 3.6E-05 |
| Sband delay (usec) | 4.62994514837E+03 | | Apriori clock (usec) | | 1.3136809E+01 | | Resid sbdelay (usec) | | 1.04050E-03 | +/- 2.8E-04 |
| Phase delay (usec) | 4.62994410926E+03 | | Apriori clockrate (us/s) | | -2.1600000E-07 | | Resid phdelay (usec) | | 1.39448E-06 | +/- 1.2E-07 |
| Delay rate (us/s) | -2.05203297785E-02 | | Apriori rate (us/s) | | -2.05202982264E-02 | | Resid rate (us/s) | | -3.15521E-08 | +/- 1.2E-09 |
| Total phase (deg) | 205.8 | | Apriori accel (us/s/s) | | -2.49166617671E-05 | | Resid phase (deg) | | 43.2 | +/- 3.8 |

| | RMS | Theor. | Amplitude | 0.827 +/- 0.027 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|-------------------------------|
| ph/seg (deg) | 21.6 | 8.9 | Search (1024X32) | 0.782 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 18.5 | 15.5 | Interp. | 0.000 | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 18.9 | 5.3 | Inc. seg. avg. | 0.866 | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 10.8 | 9.3 | Inc. frq. avg. | 0.852 | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |

B: az 234.2 el 28.0 pa 31.1 Z: az 247.3 el 14.6 pa 27.3 u,v (fr/asec) 104.624 -918.830 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BZ..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BZ.W.57.196Q8V

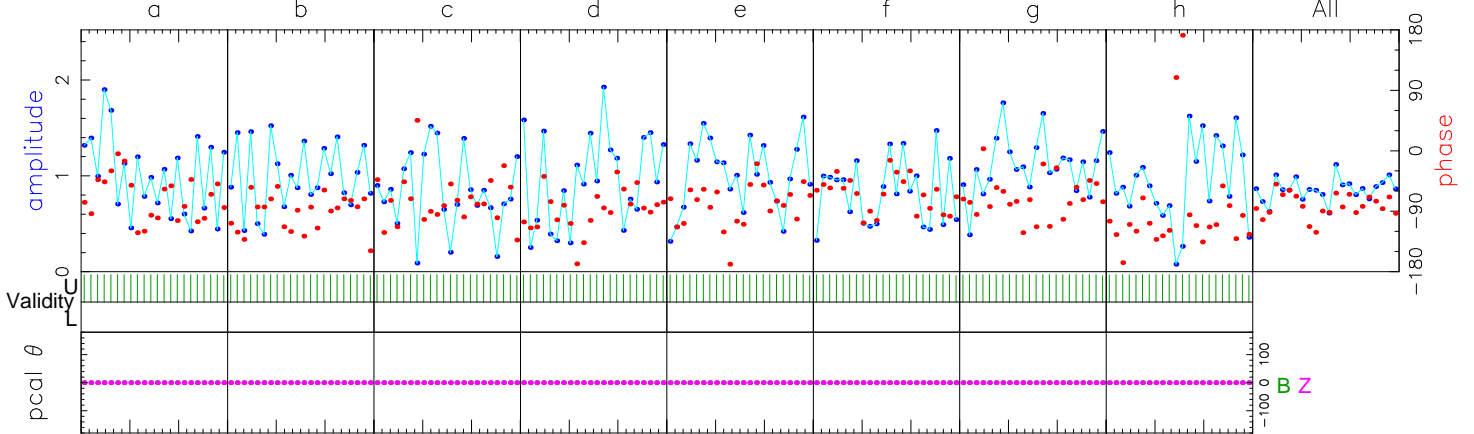


Fringe quality 8

SNR 30.8
Int time 179.635
Amp 0.841
Phase -80.4
PFD 0.0e+00
Delays (us)
SBD -0.001754
MBD -0.002220
Fringe rate (Hz)
-0.002673
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

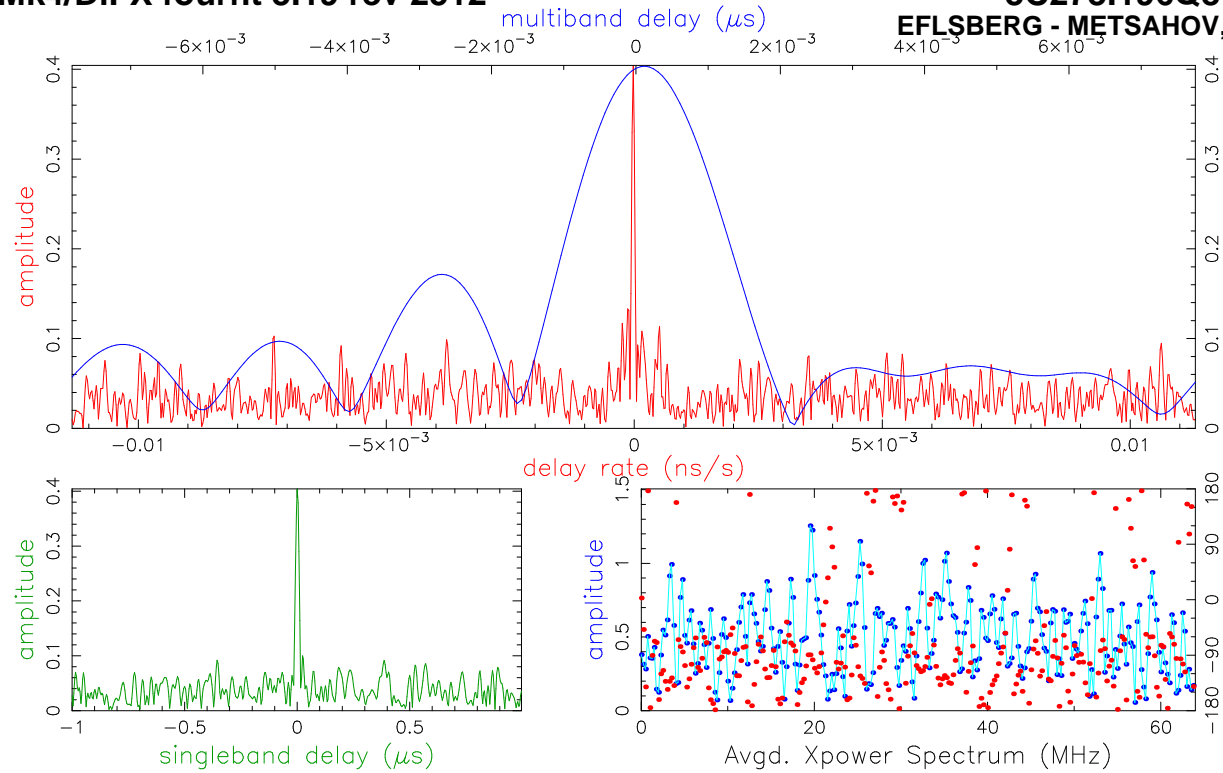
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153442
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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 |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -71.2 | -89.8 | -80.3 | -86.2 | -75.0 | -59.6 | -70.2 | -110.9 | Phase | -80.4 |
| | 0.9 | 0.9 | 0.7 | 0.8 | 0.9 | 0.8 | 1.0 | 0.8 | Ampl. | 0.8 |
| | 256.6 | 256.6 | 257.0 | 255.8 | 256.8 | 257.1 | 256.1 | 255.9 | Sbd box | 256.6 |
| 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 | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:Z | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:Z | 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 | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| Z | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 4.62994188810E+03 | | Apriori delay (usec) | | 4.62994410787E+03 | | Resid mbdelay (usec) | | -2.21977E-03 | +/- 3.5E-05 |
| Sband delay (usec) | 4.62994235412E+03 | | Apriori clock (usec) | | 1.3136809E+01 | | Resid sbdelay (usec) | | -1.75375E-03 | +/- 2.8E-04 |
| Phase delay (usec) | 4.62994410527E+03 | | Apriori clockrate (us/s) | | -2.1600000E-07 | | Resid phdelay (usec) | | -2.59271E-06 | +/- 1.2E-07 |
| Delay rate (us/s) | -2.05203292556E-02 | | Apriori rate (us/s) | | -2.05202982264E-02 | | Resid rate (us/s) | | -3.10292E-08 | +/- 1.2E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -2.49166617671E-05 | | Resid phase (deg) | | -80.4 | +/- 3.7 |

ph/seg (deg) 17.3 8.7 Search (1024X32) 0.786 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 14.0 15.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.8 5.3 Inc. seg. avg. 0.849 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.1 9.2 Inc. frq. avg. 0.842 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 234.2 el 28.0 pa 31.1 Z: az 247.3 el 14.6 pa 27.3 u,v (fr/asec) 104.624 -918.830 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BZ..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BZ.W.70.196Q8V

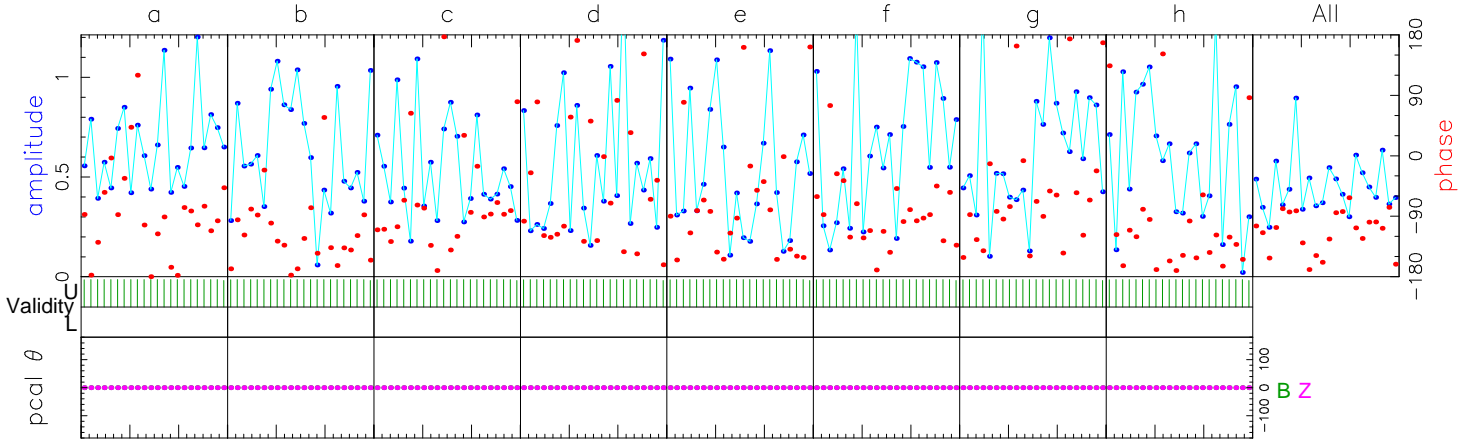


Fringe quality 9

SNR 14.8
Int time 179.635
Amp 0.404
Phase -109.1
PFD 3.4e-41
Delays (us)
SBD 0.000627
MBD 0.000126
Fringe rate (Hz)
-0.002464
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153446
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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 |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -98.2 | -127.0 | -99.5 | -122.8 | -111.1 | -91.2 | -90.8 | -134.8 | Phase | -109.1 |
| | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | Ampl. | 0.4 |
| | 257.5 | 256.2 | 257.9 | 256.7 | 257.2 | 257.2 | 257.0 | 256.5 | Sbd box | 257.2 |
| 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 | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:Z | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:Z | 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 | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| Z | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 4.62994423397E+03 | | Apriori delay (usec) | | 4.62994410787E+03 | | Resid mbdelay (usec) | | 1.26107E-04 | +/- 7.3E-05 |
| Sband delay (usec) | 4.62994473462E+03 | | Apriori clock (usec) | | 1.3136809E+01 | | Resid sbdelay (usec) | | 6.26750E-04 | +/- 5.8E-04 |
| Phase delay (usec) | 4.62994410435E+03 | | Apriori clockrate (us/s) | | -2.1600000E-07 | | Resid phdelay (usec) | | -3.51702E-06 | +/- 2.5E-07 |
| Delay rate (us/s) | -2.05203268309E-02 | | Apriori rate (us/s) | | -2.05202982264E-02 | | Resid rate (us/s) | | -2.86045E-08 | +/- 2.4E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -2.49166617671E-05 | | Resid phase (deg) | | -109.1 | +/- 7.7 |

| | RMS | Theor. | Amplitude | 0.404 +/- 0.027 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|----------------------------------------|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 30.2 | 18.1 | Search (1024X32) | 0.394 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 36.5 | 31.6 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 18.4 | 10.9 | Inc. seg. avg. | 0.435 | Sample rate(MSamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 17.9 | 19.1 | Inc. frq. avg. | 0.413 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

B: az 234.2 el 28.0 pa 31.1 Z: az 247.3 el 14.6 pa 27.3 u,v (fr/asec) 104.624 -918.830 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BZ..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BZ.W.96.196Q8V