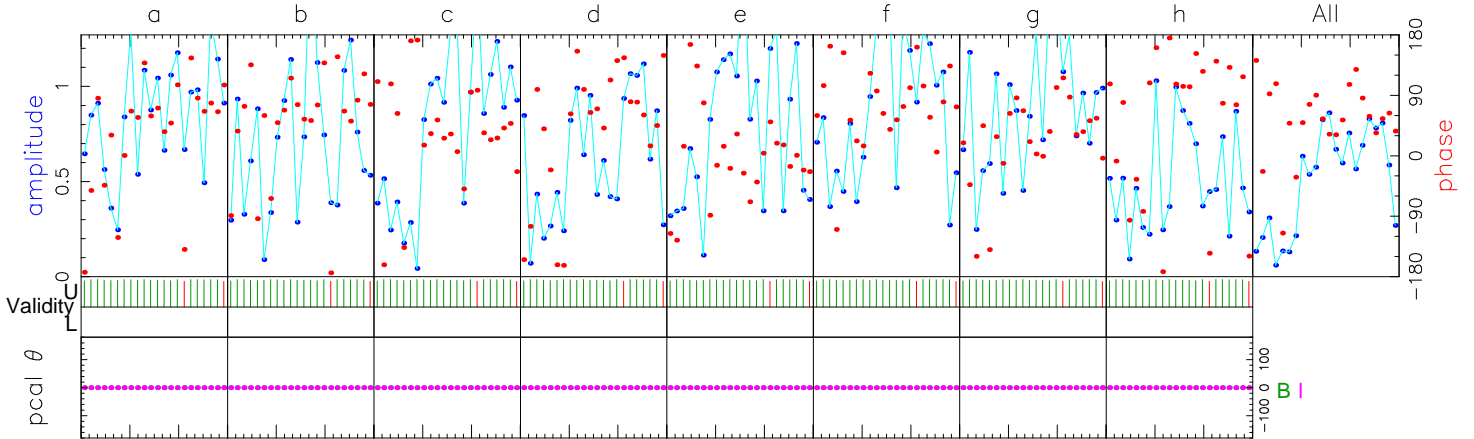


Fringe quality 8
 SNR 15.4
 Int time 176.492
 Amp 0.424
 Phase 61.3
 PFD 5.6e-45
 Delays (us)
 SBD 0.000479
 MBD 0.006325
 Fringe rate (Hz) 0.000853
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build 2020:206:023107
 2020:206:153639
 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

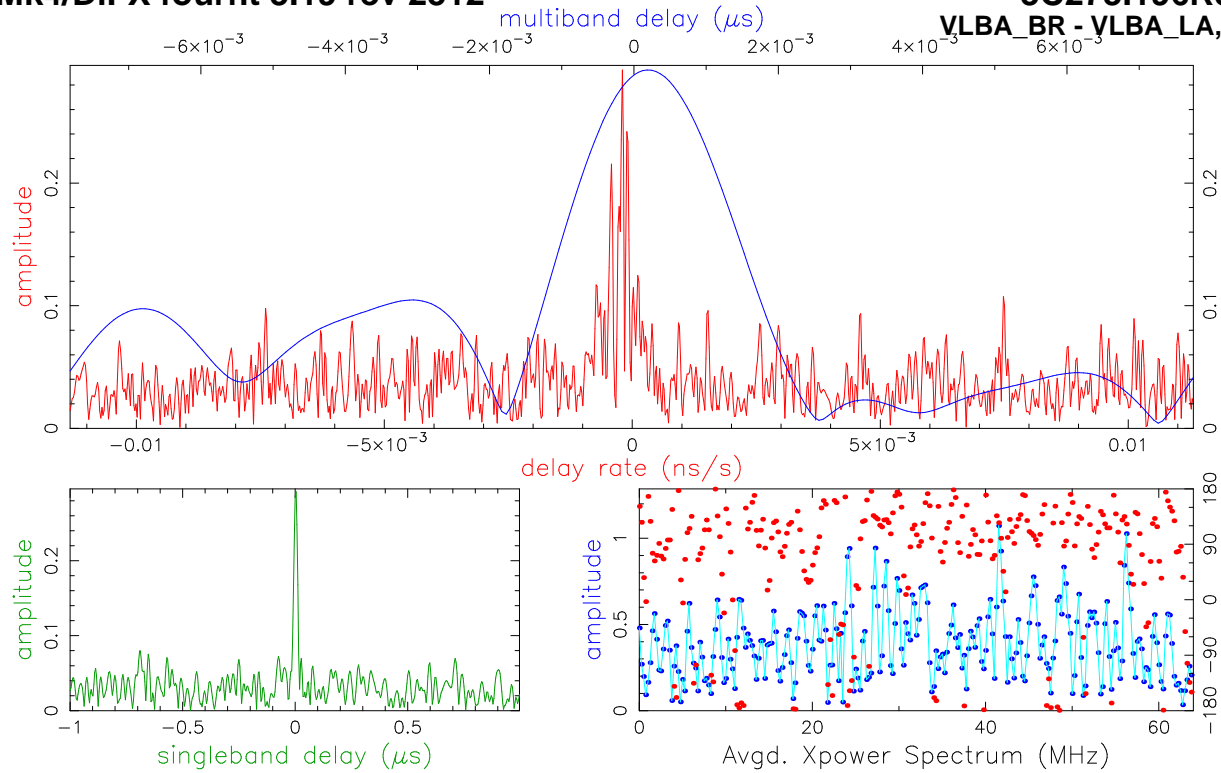


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |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

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|-------------|-----|---------|
| Group delay (usec)(sbd) | 5.16143738572E+02 | Apriori delay (usec) | 5.16137413729E+02 | Resid mbdelay (usec) | 6.32484E-03 | +/- | 7.0E-05 |
| Sband delay (usec) | 5.16137892729E+02 | Apriori clock (usec) | 1.6754059E+01 | Resid sbdelay (usec) | 4.79000E-04 | +/- | 5.6E-04 |
| Phase delay (usec) | 5.16137415705E+02 | Apriori clockrate (us/s) | -4.8999999E-08 | Resid phdelay (usec) | 1.97639E-06 | +/- | 2.4E-07 |
| Delay rate (us/s) | -1.88140317508E+00 | Apriori rate (us/s) | -1.88140318498E+00 | Resid rate (us/s) | 9.89997E-09 | +/- | 2.3E-09 |
| Total phase (deg) | 356.0 | Apriori accel (us/s/s) | -1.93997312186E-06 | Resid phase (deg) | 61.3 | +/- | 7.4 |

| | | | | | | | | | | | |
|--------------|------|------------------|-------|----------------|-----------------|------------------------|-----------------------------|----------------------|-------------------|------------------|-----------|
| ph/seg (deg) | 55.5 | Theor. | 17.5 | Amplitude | 0.424 +/- 0.028 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | | |
| amp/seg (%) | 65.8 | Search (1024X32) | 0.414 | Interp. | 0.000 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 1.000 | | |
| ph/frq (deg) | 42.1 | Inc. seg. avg. | 0.487 | Inc. frq. avg. | 0.500 | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 | |
| amp/frq (%) | 31.3 | Inc. frq. avg. | 0.500 | | | Sample rate (MSamp/s): | 128 | dr window (ns/s) | -0.011 0.011 | | |
| | | | | | | Data rate (Mb/s): | 2048 | nlags: 256 | t_cohere infinite | ion window (TEC) | 0.00 0.00 |

B: az 239.0 el 25.3 pa 33.1 I: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) 10780.671 1648.402 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/BI..196R8V Output file: /Exps/c201e/v1/1234/No0049/BI.W.17.196R8V

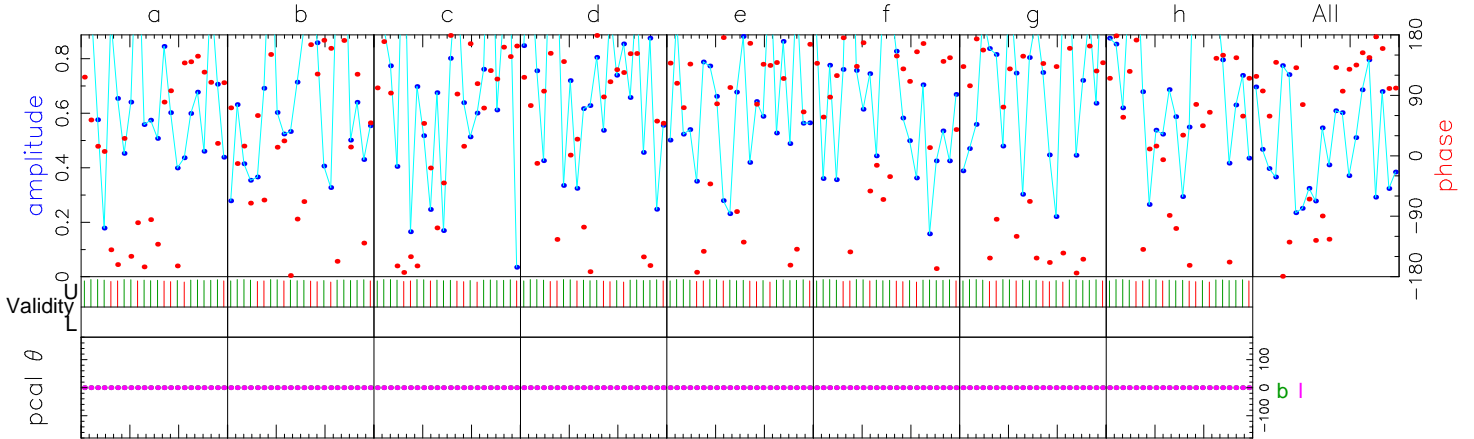


Fringe quality 9

SNR 10.7
Int time 173.728
Amp 0.296
Phase 146.9
PFD 3.3e-18
Delays (us)
SBD 0.002398
MBD 0.000159
Fringe rate (Hz)
-0.018096
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153639
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



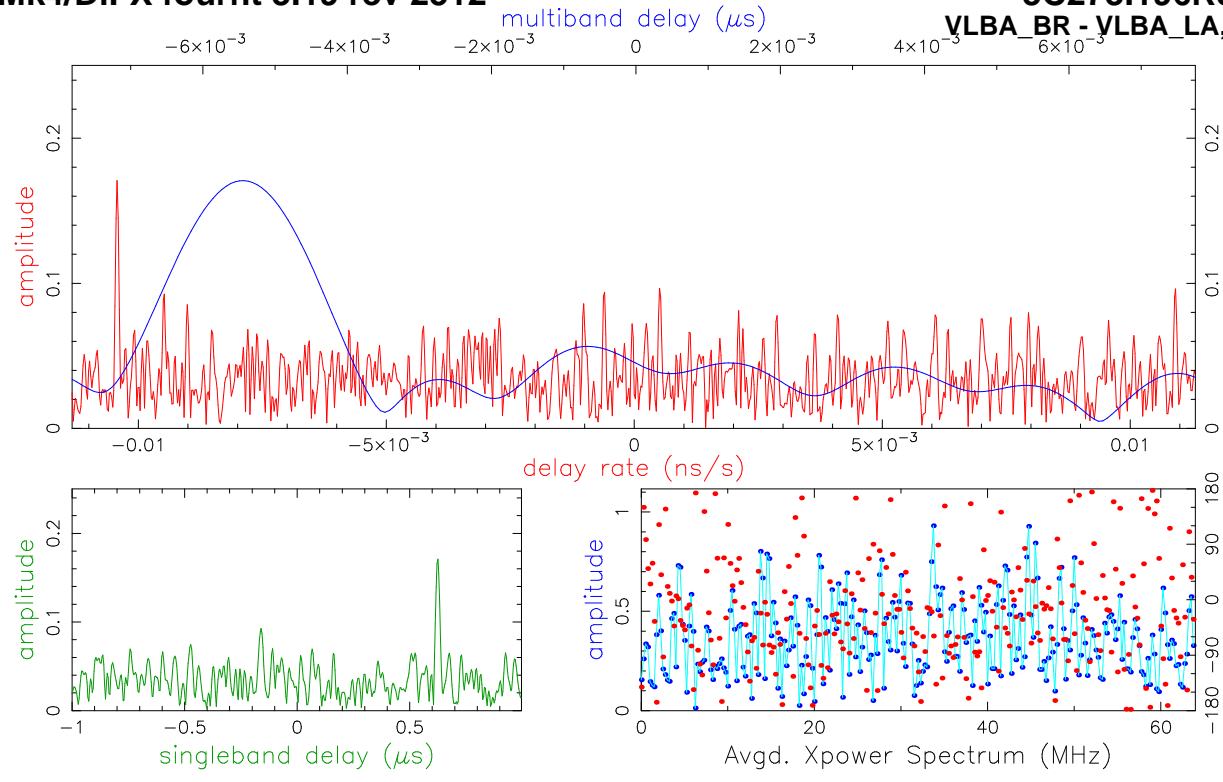
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|------------------|-----------------|--|----------|----------|----------|-----------------------|--------------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| b:l | 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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -4.41987295086E+03 | | | | -4.41987310958E+03 | | | | 1.58722E-04 | +/- 1.0E-04 |
| Sband delay (usec) | -4.41987071108E+03 | | | | 2.3190095E+00 | | | | 2.39850E-03 | +/- 8.1E-04 |
| Phase delay (usec) | -4.41987310484E+03 | | | | 1.0899999E-07 | | | | 4.73841E-06 | +/- 3.5E-07 |
| Delay rate (us/s) | -1.08481918341E-01 | | | | -1.08481708259E-01 | | | | -2.10082E-07 | +/- 3.3E-09 |
| Total phase (deg) | | | -90.5 | | 2.41224151323E-05 | | | | 146.9 | +/- 10.7 |
| | RMS | Theor. | Amplitude | 0.296 +/- 0.028 | Pcal mode: MANUAL, MANUAL | | | | PC period (AP's) 5, 5 | |
| ph/seg (deg) | 62.6 | 25.2 | Search (1024X32) | 0.273 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 88.4 | 44.0 | Interp. | 0.000 | Bits/sample: 2x2 | | | | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 19.1 | 15.2 | Inc. seg. avg. | 0.444 | Sample rate(MISamp/s): 128 | | | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 36.1 | 26.5 | Inc. frq. avg. | 0.295 | Data rate(Mb/s): 2048 | | | | ion window (TEC) | 0.00 0.00 |

b: az 99.4 el 10.9 pa -41.2 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) 634.405 1480.919 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/bl..196R8V Output file: /Exps/c201e/v1/1234/No0049/bl.W.19.196R8V

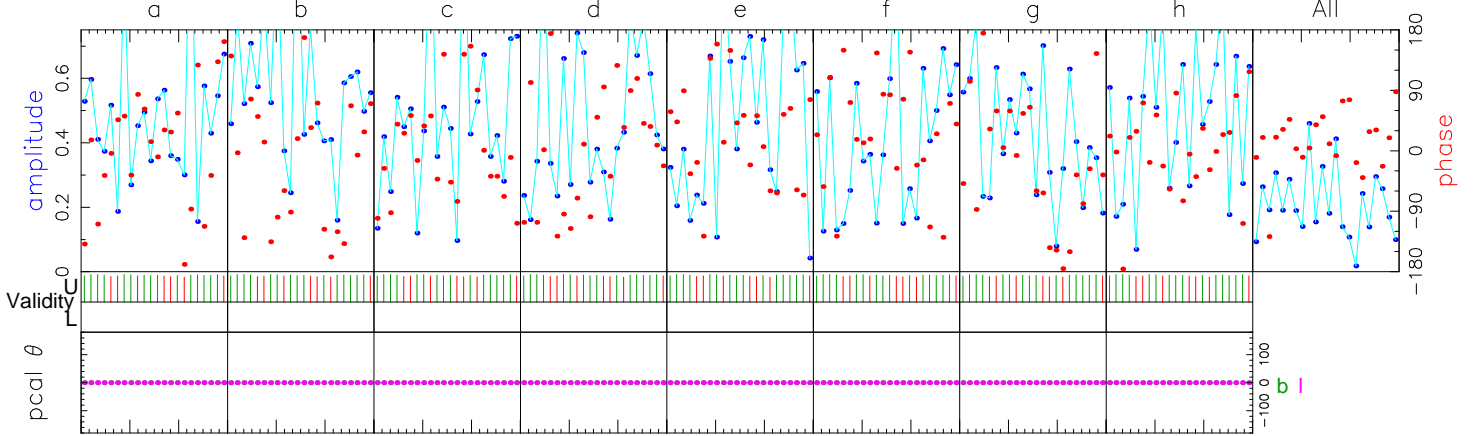
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196R8V, No0049, bl
VLBA_BR - VLBA_LA, fgroup W, pol LR



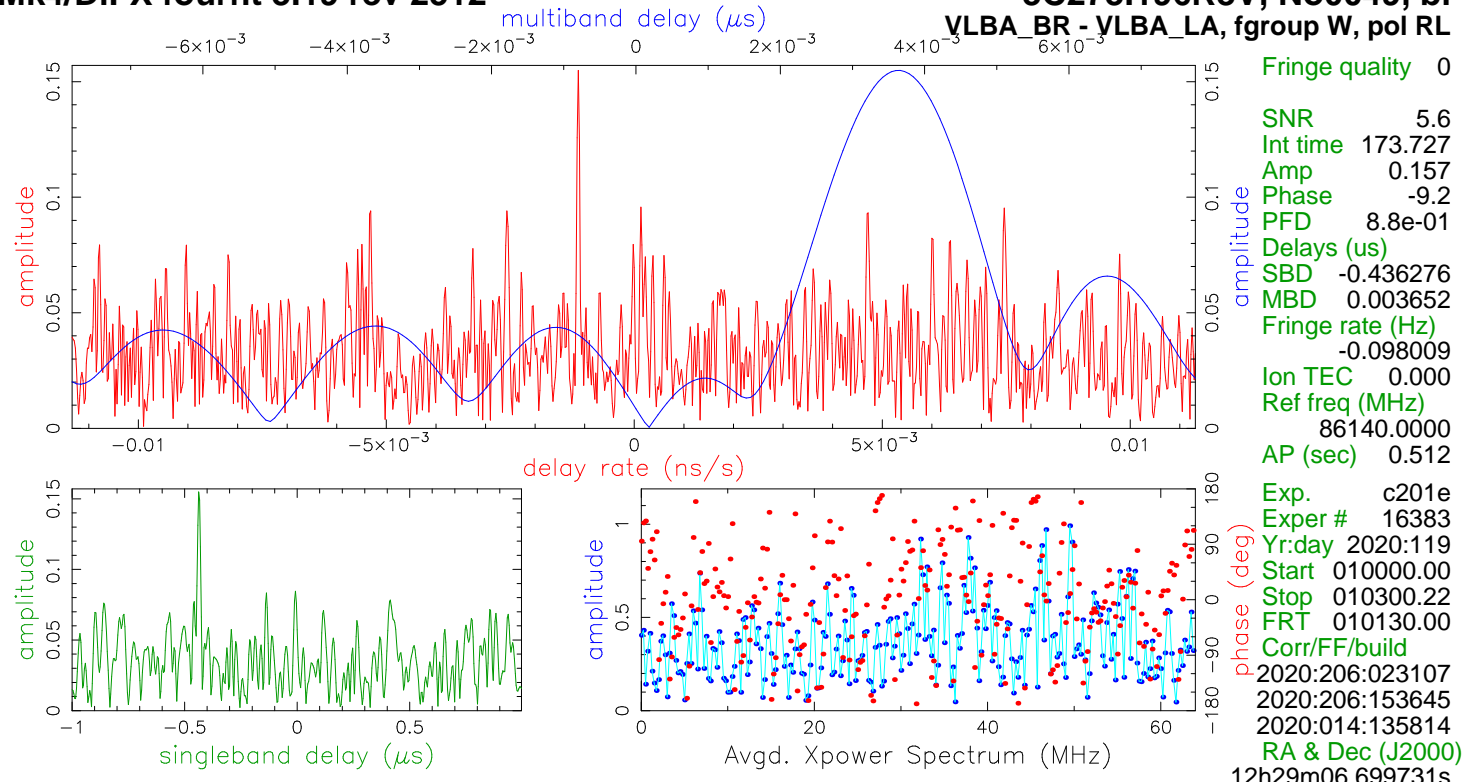
Fringe quality 0
SNR 6.2
Int time 173.727
Amp 0.250
Phase 15.8
PFD 7.9e-02
Delays (us)
SBD 0.623929
MBD -0.005457
Fringe rate (Hz)
-0.899376
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153642
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

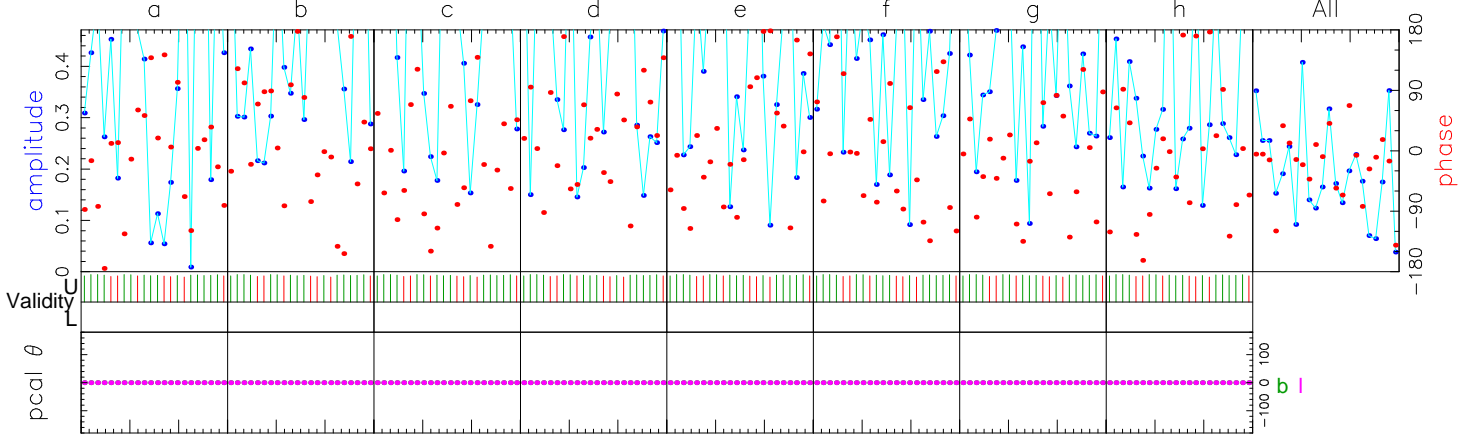


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All | | | |
|-------------------------|--------------------|----------|------------------|-----------------|--------------------|----------|----------|----------|--|-----------------------|-------------------|------------------|-----------|
| 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 | | | | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | | |
| b:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | | | |
| b:l | 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 | | | | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | | | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | | | | |
| Group delay (usec)(sbd) | -4.41925356652E+03 | | | | -4.41987310958E+03 | | | | Resid mbdelay (usec) | -5.45693E-03 | +/- 1.8E-04 | | |
| Sband delay (usec) | -4.41924918033E+03 | | | | 2.3190095E+00 | | | | Resid sbdelay (usec) | 6.23929E-01 | +/- 1.4E-03 | | |
| Phase delay (usec) | -4.41987310907E+03 | | | | 1.0899999E-07 | | | | Resid phdelay (usec) | 5.08449E-07 | +/- 6.0E-07 | | |
| Delay rate (us/s) | -1.08492149126E-01 | | | | -1.08481708259E-01 | | | | Resid rate (us/s) | -1.04409E-05 | +/- 5.7E-09 | | |
| Total phase (deg) | | | -221.6 | | 2.41224151323E-05 | | | | Resid phase (deg) | 15.8 | +/- 18.5 | | |
| | RMS | Theor. | Amplitude | 0.250 +/- 0.040 | | | | | PCal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | | |
| ph/seg (deg) | 45.0 | 43.4 | Search (1024X32) | 0.163 | | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 1.000 | | |
| amp/seg (%) | 64.8 | 75.8 | Interp. | 0.000 | | | | | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 | |
| ph/frq (deg) | 14.5 | 26.2 | Inc. seg. avg. | 0.240 | | | | | Sample rate(MISamp/s): 128 | | dr window (ns/s) | -0.011 0.011 | |
| amp/frq (%) | 35.2 | 45.7 | Inc. frq. avg. | 0.230 | | | | | Data rate(Mb/s): 2048 | nlags: 256 | t_cohere infinite | ion window (TEC) | 0.00 0.00 |

b: az 99.4 el 10.9 pa -41.2 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) 634.405 1480.919 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/bl..196R8V Output file: /Exps/c201e/v1/1234/No0049/bl.W.35.196R8V

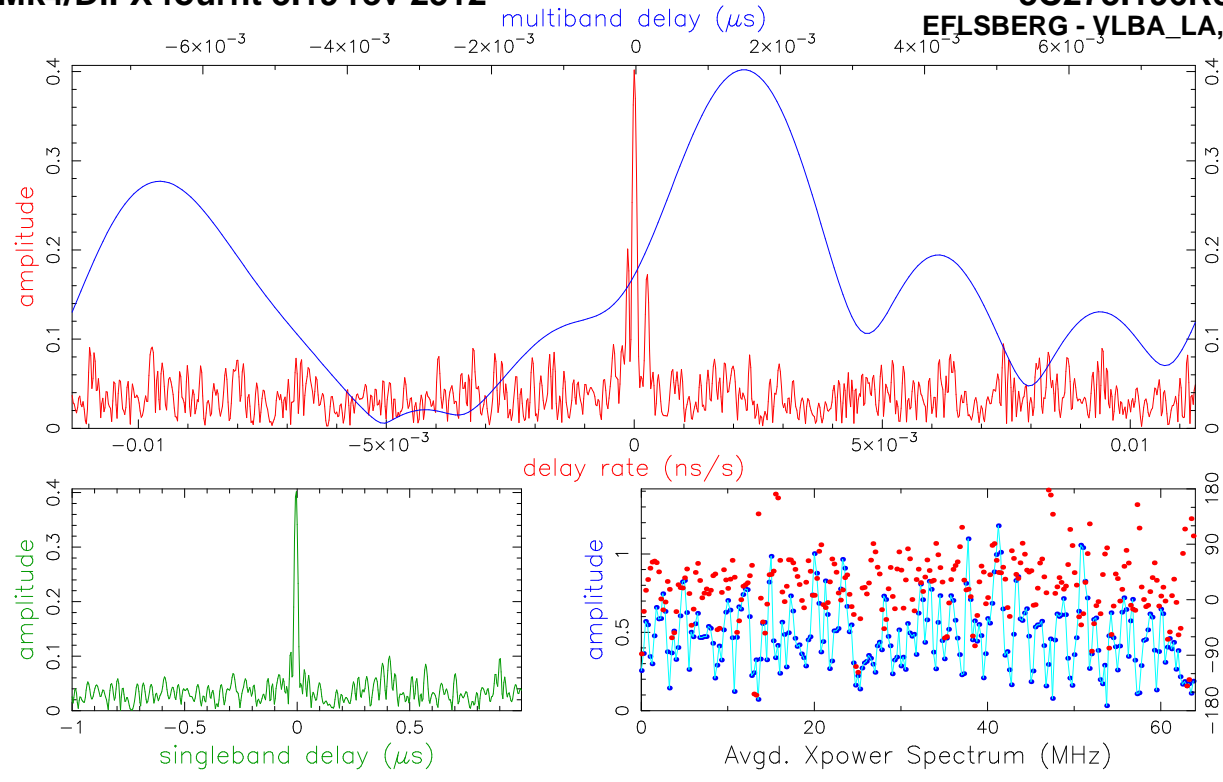


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



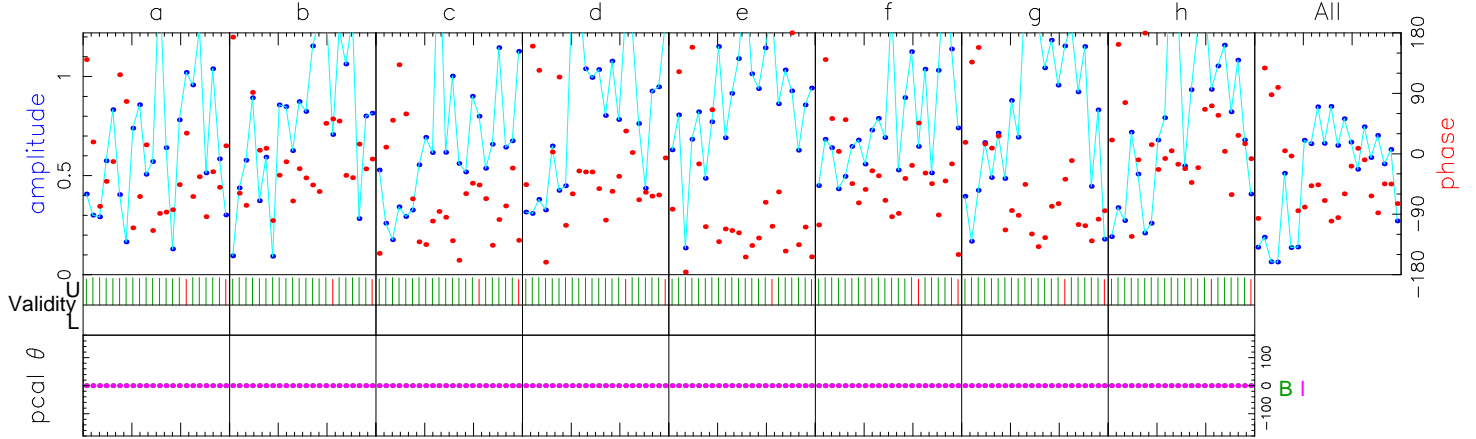
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|--------------------|----------------------|--------------|----------|----------|------------|-------|
| | -17.2 | -5.7 | -1.6 | 12.1 | -12.6 | -66.7 | 5.8 | -13.9 | | -9.2 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | | 0.1 |
| | 505.3 | 368.2 | 495.1 | 286.4 | 313.1 | 92.8 | 141.2 | 387.2 | Sbd box | 145.3 |
| 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 | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| b:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| b:l | 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 | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -4.42030695715E+03 | | Apriori delay (usec) | -4.41987310958E+03 | Resid mbdelay (usec) | 3.65244E-03 | +/- | 1.9E-04 | | |
| Sband delay (usec) | -4.42030938558E+03 | | Apriori clock (usec) | 2.3190095E+00 | Resid sbdelay (usec) | -4.36276E-01 | +/- | 1.5E-03 | | |
| Phase delay (usec) | -4.41987310988E+03 | | Apriori clockrate (us/s) | 1.0899999E-07 | Resid phdelay (usec) | -2.95273E-07 | +/- | 6.6E-07 | | |
| Delay rate (us/s) | -1.08482846046E-01 | | Apriori rate (us/s) | -1.08481708259E-01 | Resid rate (us/s) | -1.13779E-06 | +/- | 6.3E-09 | | |
| Total phase (deg) | | -246.6 | Apriori accel (us/s/s) | 2.41224151323E-05 | Resid phase (deg) | -9.2 | +/- | 20.3 | | |

ph/seg (deg) 49.2 47.7 Search (1024X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.9 83.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.3 28.7 Inc. seg. avg. 0.146 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.4 50.2 Inc. frq. avg. 0.147 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 99.4 el 10.9 pa -41.2 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) 634.405 1480.919 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/bl..196R8V Output file: /Exps/c201e/v1/1234/No0049/bl.W.49.196R8V



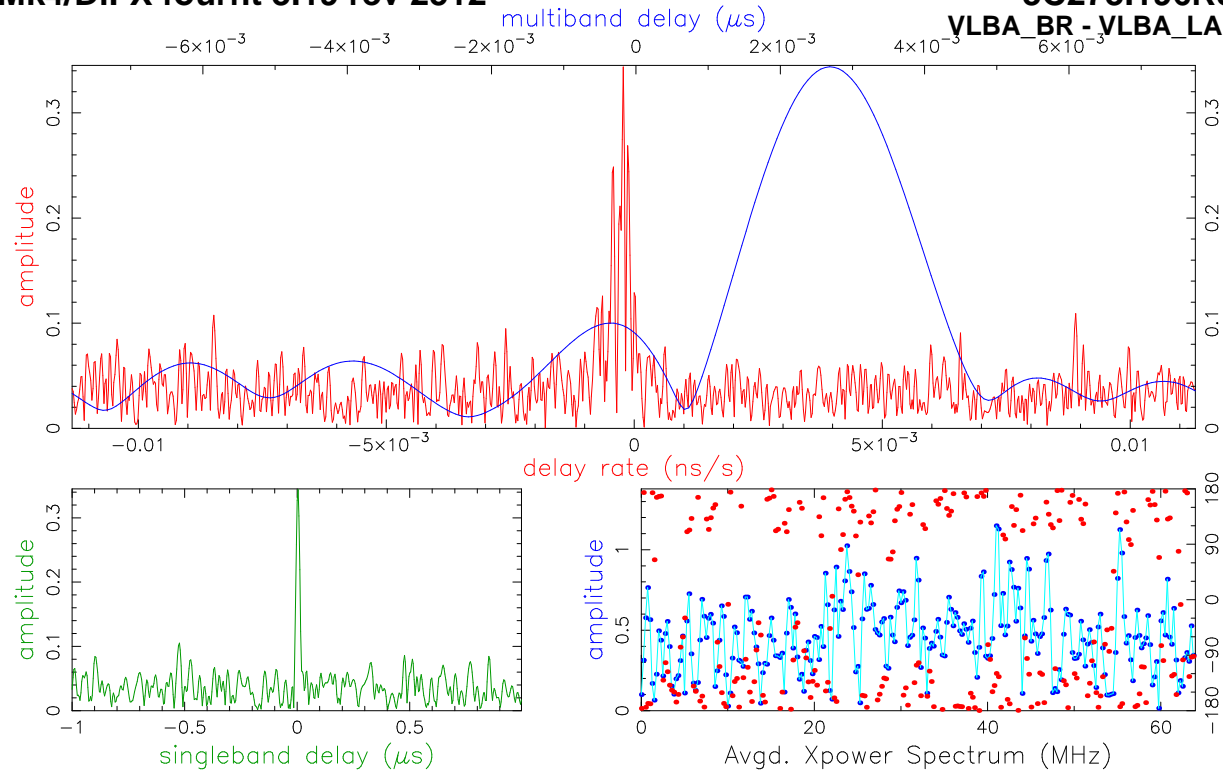
Fringe quality 8
SNR 14.8
Int time 176.493
Amp 0.407
Phase -53.7
PFD 5.8e-41
Delays (us)
SBD -0.005371
MBD 0.001450
Fringe rate (Hz) 0.000431
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153647
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 |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -49.7 | -14.8 | -95.2 | -37.2 | -126.1 | -43.9 | -79.9 | 4.9 | Phase | -53.7 |
| | 0.4 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | Ampl. | 0.5 |
| | 254.8 | 256.1 | 255.7 | 256.0 | 256.4 | 256.8 | 256.5 | 257.3 | Sbd box | 255.6 |
| 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 | |
| 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 | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 5.16138863604E+02 | | Apriori delay (usec) | | 5.16137413729E+02 | | Resid mbdelay (usec) | | 1.44987E-03 | +/- 7.3E-05 |
| Sband delay (usec) | 5.16132042479E+02 | | Apriori clock (usec) | | 1.6754059E+01 | | Resid sbdelay (usec) | | -5.37125E-03 | +/- 5.8E-04 |
| Phase delay (usec) | 5.16137411997E+02 | | Apriori clockrate (us/s) | | -4.8999999E-08 | | Resid phdelay (usec) | | -1.73134E-06 | +/- 2.5E-07 |
| Delay rate (us/s) | -1.88140317997E+00 | | Apriori rate (us/s) | | -1.88140318498E+00 | | Resid rate (us/s) | | 5.00525E-09 | +/- 2.4E-09 |
| Total phase (deg) | 241.0 | | Apriori accel (us/s/s) | | -1.93997312186E-06 | | Resid phase (deg) | | -53.7 | +/- 7.8 |

| | RMS | Theor. | Amplitude | 0.407 +/- 0.028 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 1.000 |
|--------------|------|--------|------------------|-----------------|--|------------------------------|------------------|--------------|
| ph/seg (deg) | 66.8 | 18.2 | Search (1024X32) | 0.400 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| amp/seg (%) | 68.8 | 31.7 | Interp. | 0.000 | Sample rate(MISamp/s): 128 | nlags: 256 t_cohere infinite | dr window (ns/s) | -0.011 0.011 |
| ph/frq (deg) | 46.5 | 11.0 | Inc. seg. avg. | 0.481 | Data rate(Mb/s): 2048 | | ion window (TEC) | 0.00 0.00 |
| amp/frq (%) | 32.0 | 19.1 | Inc. frq. avg. | 0.517 | | | | |

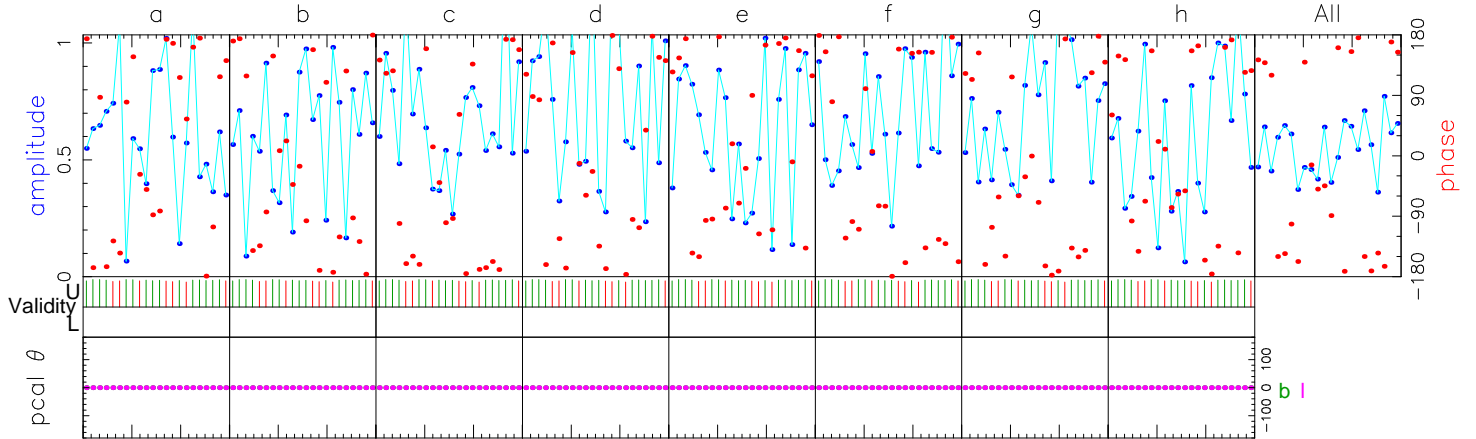


Fringe quality 9

SNR 12.4
Int time 173.726
Amp 0.345
Phase -170.0
PFD 4.3e-27
Delays (us)
SBD 0.003081
MBD 0.002680
Fringe rate (Hz)
-0.018211
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153637
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



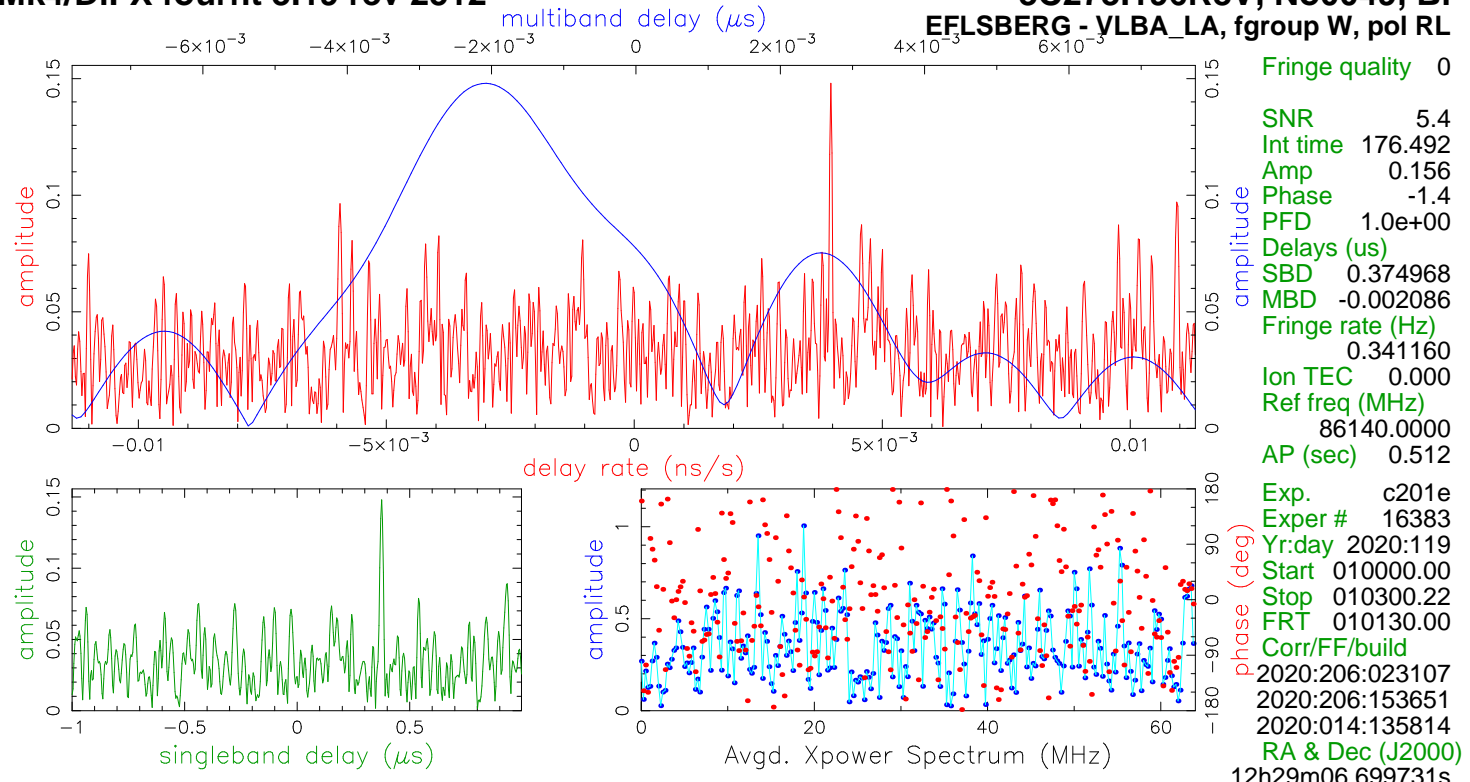
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |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

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | -4.41987042961E+03 | Apriori delay (usec) | -4.41987310958E+03 | Resid mbdelay (usec) | 2.67997E-03 | +/- | 8.7E-05 |
| Sband delay (usec) | -4.41987002833E+03 | Apriori clock (usec) | 2.3190095E+00 | Resid sbdelay (usec) | 3.08125E-03 | +/- | 6.9E-04 |
| Phase delay (usec) | -4.41987311506E+03 | Apriori clockrate (us/s) | 1.0899999E-07 | Resid phdelay (usec) | -5.48094E-06 | +/- | 3.0E-07 |
| Delay rate (us/s) | -1.08481919674E-01 | Apriori rate (us/s) | -1.08481708259E-01 | Resid rate (us/s) | -2.11415E-07 | +/- | 2.9E-09 |
| Total phase (deg) | -47.4 | Apriori accel (us/s/s) | 2.41224151323E-05 | Resid phase (deg) | -170.0 | +/- | 9.2 |

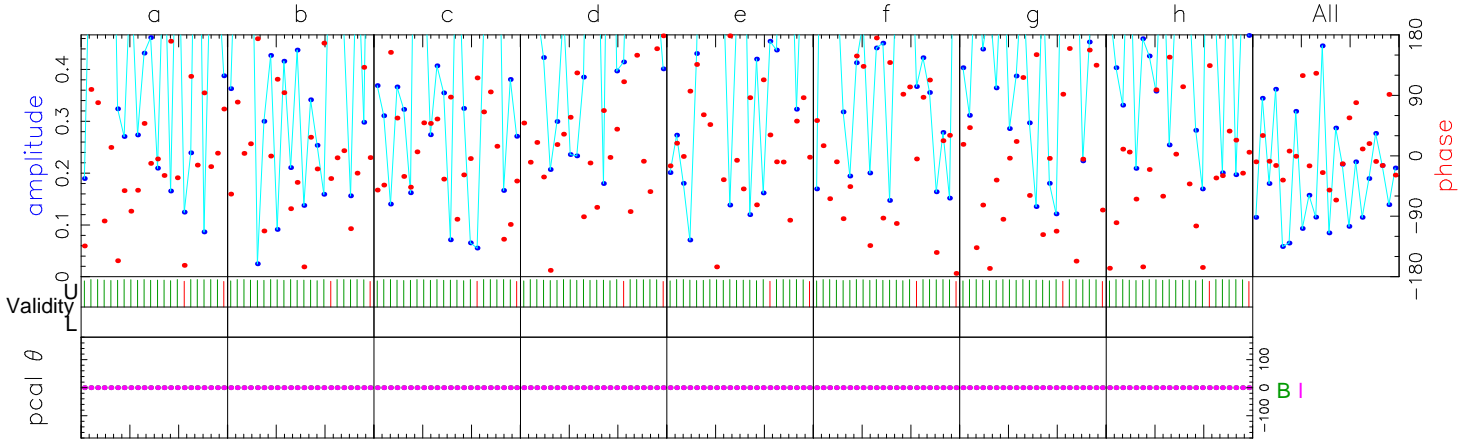
| | | | | | | | | | | | | |
|--------------|------|--------|------|------------------|-----------------|------------------------|-----------------------------|------------------|----------|------------------|--------|-------|
| ph/seg (deg) | 61.9 | Theor. | 21.6 | Amplitude | 0.345 +/- 0.028 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | sb window (us) | -1.000 | 1.000 |
| amp/seg (%) | 69.3 | | 37.7 | Search (1024X32) | 0.323 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | SampCntNorm: | enabled | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 15.5 | | 13.0 | Inc. seg. avg. | 0.518 | Sample rate (MSamp/s): | 128 | nlags: | 256 | dr window (ns/s) | -0.011 | 0.011 |
| amp/frq (%) | 18.3 | | 22.7 | Inc. frq. avg. | 0.344 | Data rate (Mb/s): | 2048 | t_cohere | infinite | ion window (TEC) | 0.00 | 0.00 |

b: az 99.4 el 10.9 pa -41.2 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) 634.405 1480.919 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/bl..196R8V Output file: /Exps/c201e/v1/1234/No0049/bl.W.8.196R8V



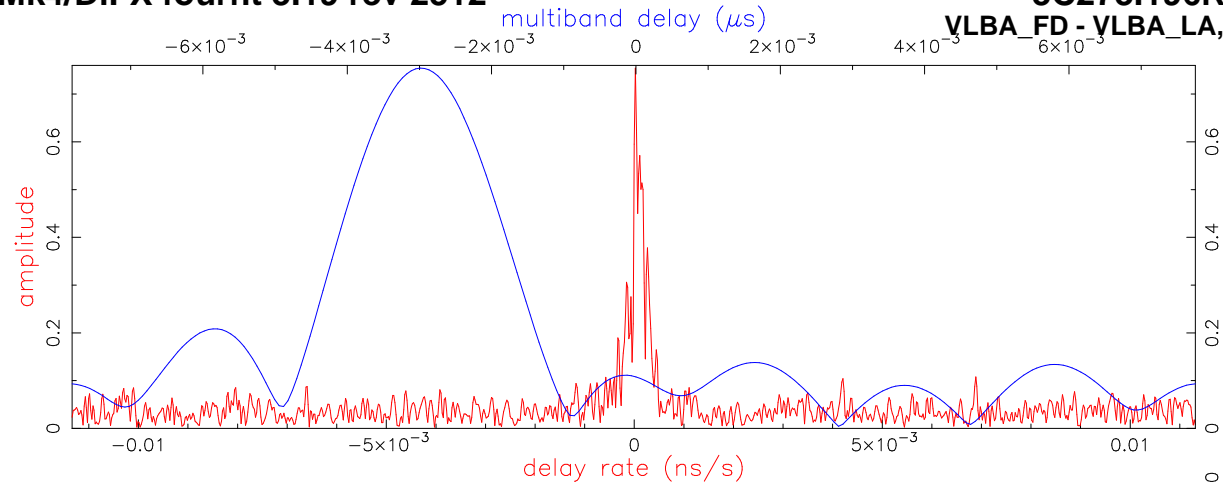
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -9.1 | -0.4 | 5.7 | -5.3 | 6.6 | 85.7 | -146.5 | -3.2 | | -1.4 |
| | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | | 0.2 |
| | 352.2 | 353.5 | 182.1 | 219.4 | 57.4 | 432.7 | 394.8 | 340.2 | Sbd box | 353.0 |
| 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 | |
| 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 | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 5.16510327585E+02 | | Apriori delay (usec) | | 5.16137413729E+02 | | Resid mbdelay (usec) | | -2.08614E-03 | +/- 2.0E-04 |
| Sband delay (usec) | 5.16512381729E+02 | | Apriori clock (usec) | | 1.6754059E+01 | | Resid sbdelay (usec) | | 3.74968E-01 | +/- 1.6E-03 |
| Phase delay (usec) | 5.16137413682E+02 | | Apriori clockrate (us/s) | | -4.8999999E-08 | | Resid phdelay (usec) | | -4.65432E-08 | +/- 6.9E-07 |
| Delay rate (us/s) | -1.88139922445E+00 | | Apriori rate (us/s) | | -1.88140318498E+00 | | Resid rate (us/s) | | 3.96053E-06 | +/- 6.6E-09 |
| Total phase (deg) | 293.2 | | Apriori accel (us/s/s) | | -1.93997312186E-06 | | Resid phase (deg) | | -1.4 | +/- 21.3 |

| | RMS | Theor. | Amplitude | 0.156 +/- 0.029 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|--|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 52.4 | 50.0 | Search (1024X32) | 0.147 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 77.3 | 87.2 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 69.3 | 30.1 | Inc. seg. avg. | 0.149 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 52.4 | 52.6 | Inc. frq. avg. | 0.163 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

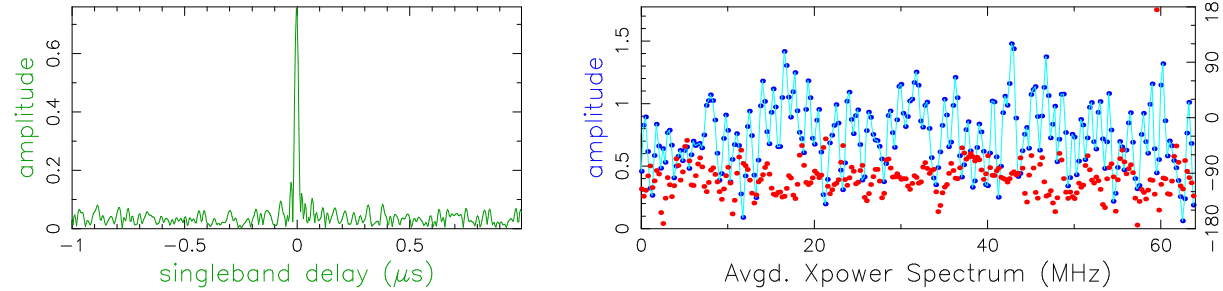
B: az 239.0 el 25.3 pa 33.1 I: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) 10780.671 1648.402 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/BI..196R8V Output file: /Exps/c201e/v1/1234/No0049/BI.W.82.196R8V



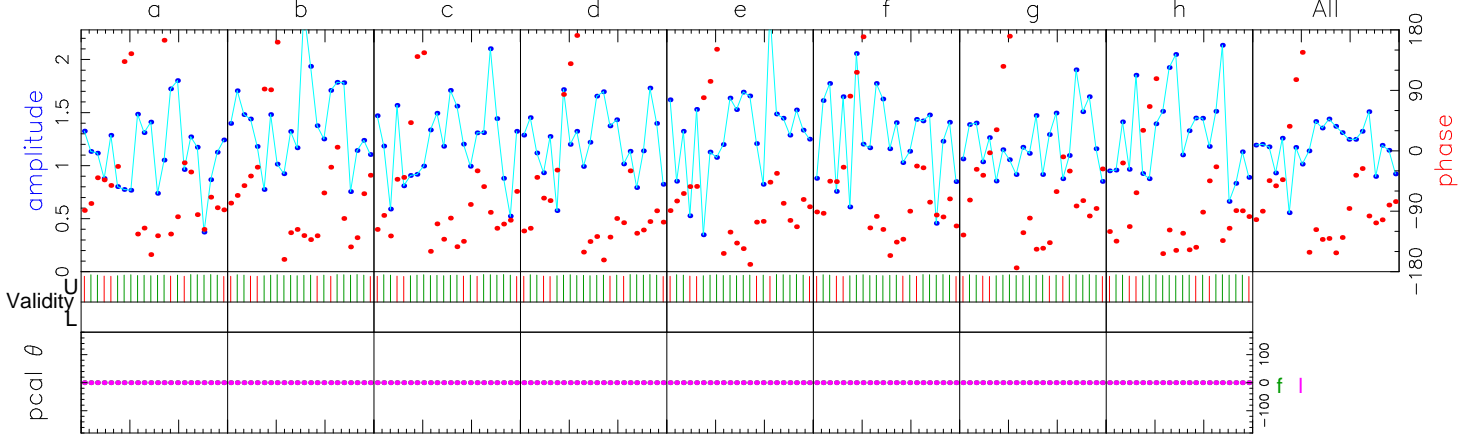
Fringe quality 7

SNR 27.4
Int time 174.345
Amp 0.760
Phase -97.8
PFD 0.0e+00
Delays (us)
SBD -0.002779
MBD -0.002950
Fringe rate (Hz) 0.002303
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:206:023107
2020:206:153655
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

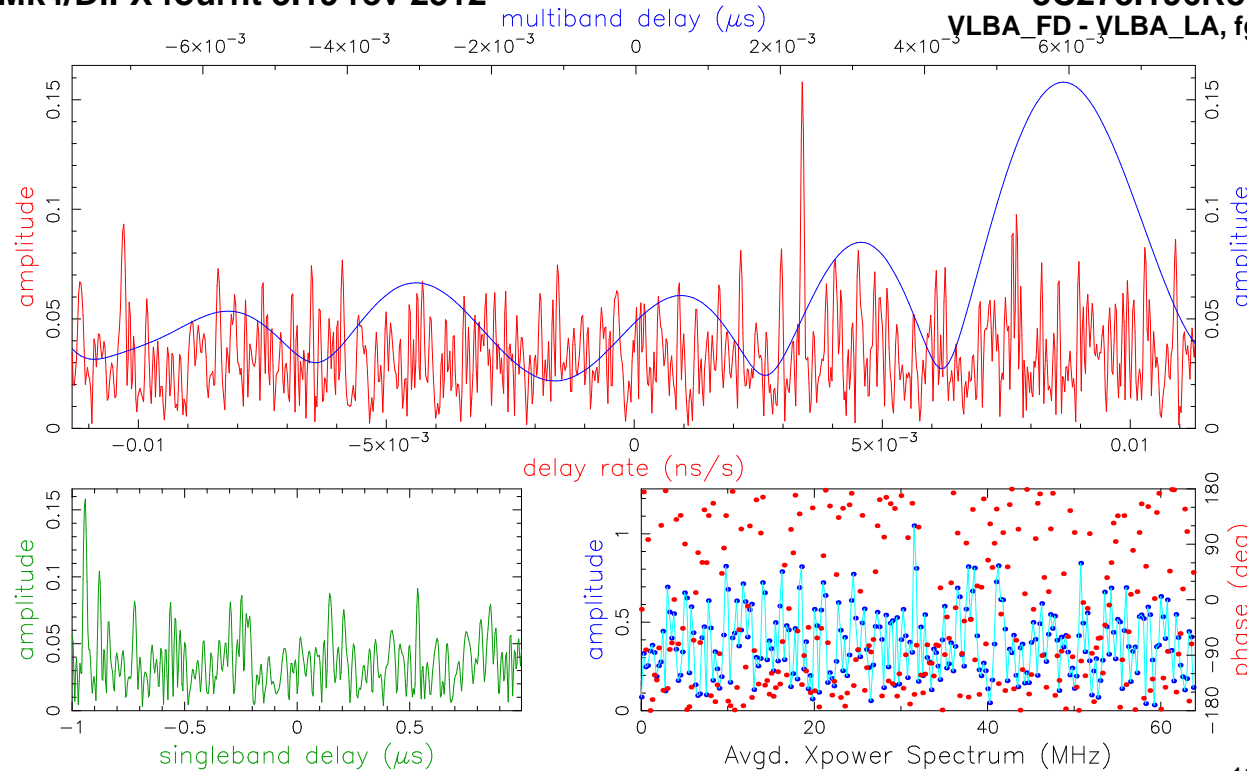


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -93.7 | -86.6 | -101.0 | -116.2 | -98.8 | -90.9 | -85.1 | -108.2 | Phase | -97.8 |
| | 0.7 | 0.7 | 0.8 | 0.8 | 0.9 | 0.7 | 0.7 | 0.7 | Ampl. | 0.8 |
| | 256.8 | 255.6 | 256.2 | 256.4 | 256.0 | 256.4 | 256.6 | 256.2 | Sbd box | 256.3 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| f:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| f:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.08473255758E+03 | | Apriori delay (usec) | | 1.08473550778E+03 | | Resid mbdelay (usec) | | -2.95020E-03 | +/- 4.0E-05 |
| Sband delay (usec) | 1.08473272878E+03 | | Apriori clock (usec) | | 7.6559677E+00 | | Resid sbdelay (usec) | | -2.77900E-03 | +/- 3.1E-04 |
| Phase delay (usec) | 1.08473550463E+03 | | Apriori clockrate (us/s) | | 2.6000000E-07 | | Resid phdelay (usec) | | -3.15506E-06 | +/- 1.3E-07 |
| Delay rate (us/s) | 4.07402337947E-02 | | Apriori rate (us/s) | | 4.07402070551E-02 | | Resid rate (us/s) | | 2.67395E-08 | +/- 1.3E-09 |
| Total phase (deg) | 132.7 | | Apriori accel (us/s/s) | | -6.01382376241E-06 | | Resid phase (deg) | | -97.8 | +/- 4.2 |

ph/seg (deg) 61.6 9.8 Search (1024X32) 0.746 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.3 17.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.6 5.9 Inc. seg. avg. 1.167 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 6.7 10.3 Inc. frq. avg. 0.762 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 104.6 el 26.5 pa -56.5 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) -236.707 -680.264 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/fl..196R8V Output file: /Exps/c201e/v1/1234/No0049/fl.W.108.196R8V

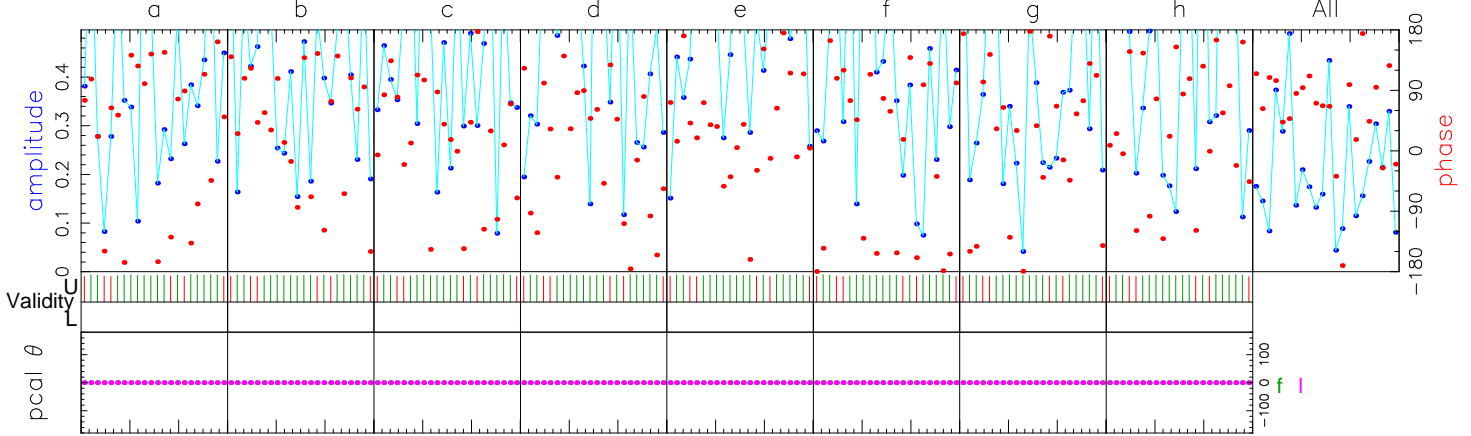


Fringe quality 0

SNR 5.8
Int time 174.344
Amp 0.166
Phase 78.6
PFD 6.4e-01
Delays (us)
SBD -0.942677
MBD 0.005923
Fringe rate (Hz)
0.293013
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153658
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



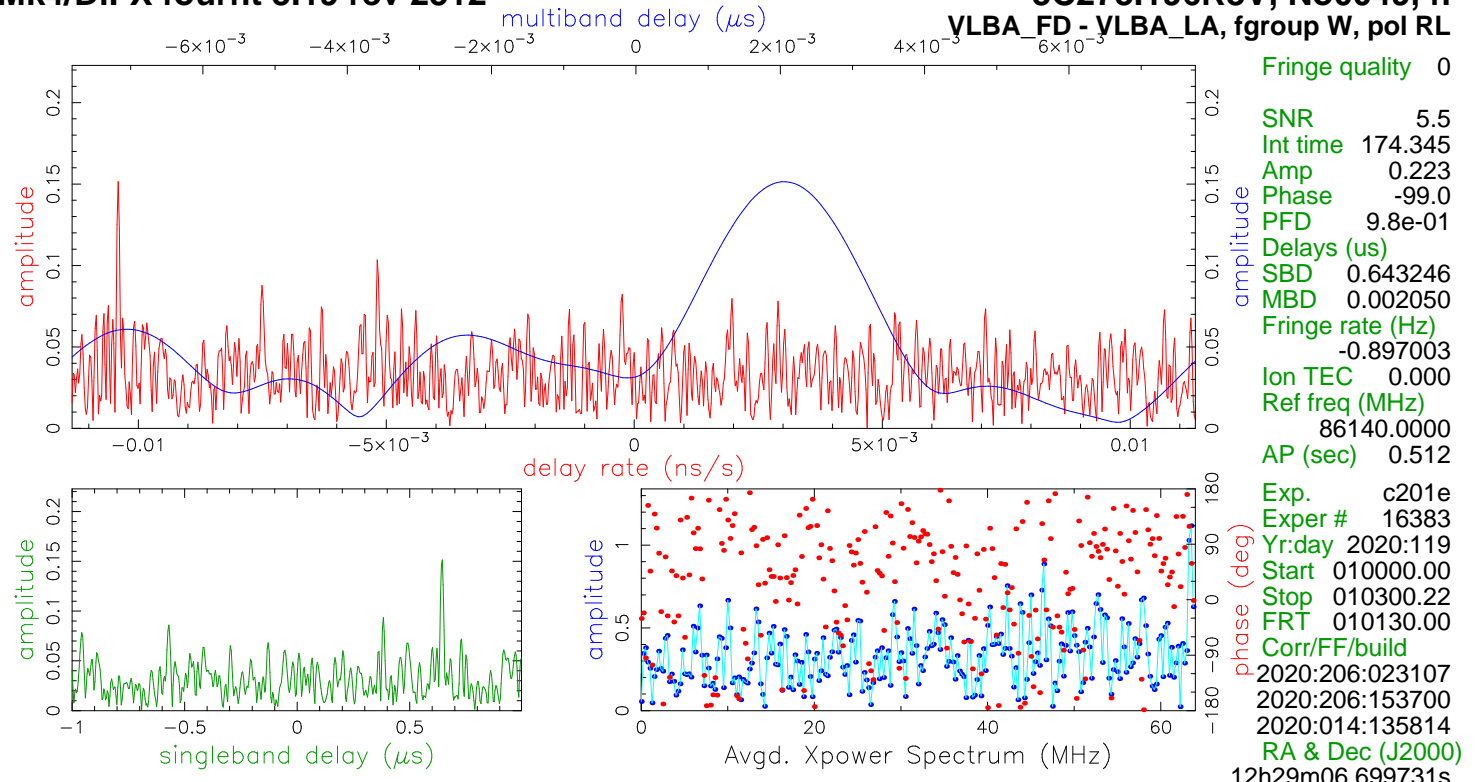
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| f:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |

| | | | | | | | |
|-------------------------|-------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 1.08378830543E+03 | Apriori delay (usec) | 1.08473550778E+03 | Resid mbdelay (usec) | 5.92265E-03 | +/- | 1.9E-04 |
| Sband delay (usec) | 1.08379283103E+03 | Apriori clock (usec) | 7.6559677E+00 | Resid sbdelay (usec) | -9.42677E-01 | +/- | 1.5E-03 |
| Phase delay (usec) | 1.08473551032E+03 | Apriori clockrate (us/s) | 2.6000000E-07 | Resid phdelay (usec) | 2.53404E-06 | +/- | 6.4E-07 |
| Delay rate (us/s) | 4.07436086461E-02 | Apriori rate (us/s) | 4.07402070551E-02 | Resid rate (us/s) | 3.40159E-06 | +/- | 6.2E-09 |
| Total phase (deg) | 309.1 | Apriori accel (us/s/s) | -6.01382376241E-06 | Resid phase (deg) | 78.6 | +/- | 19.9 |

| | | | | | | | | |
|--------------|----------|-------------|----------------------------|-----------------|-------|--|-------------------------------|-----------------------------|
| ph/seg (deg) | RMS 56.6 | Theor. 46.6 | Amplitude Search (1024X32) | 0.166 +/- 0.029 | 0.153 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | |
| amp/seg (%) | 81.3 | 81.4 | Interp. | 0.000 | 0.000 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 | |
| ph/frq (deg) | 37.5 | 28.1 | Inc. seg. avg. | 0.167 | 0.177 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) -0.008 0.008 |
| amp/frq (%) | 31.0 | 49.1 | Inc. frq. avg. | 0.177 | 0.177 | 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 |

f: az 104.6 el 26.5 pa -56.5 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) -236.707 -680.264 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/fl..196R8V Output file: /Exps/c201e/v1/1234/No0049/fl.W.122.196R8V



Fringe quality 0

SNR 5.5

Int time 174.345

Amp 0.223

Phase -99.0

PFD 9.8e-01

Delays (us)

SBD 0.643246

MBD 0.002050

Fringe rate (Hz)

-0.897003

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:206:023107

2020:206:153700

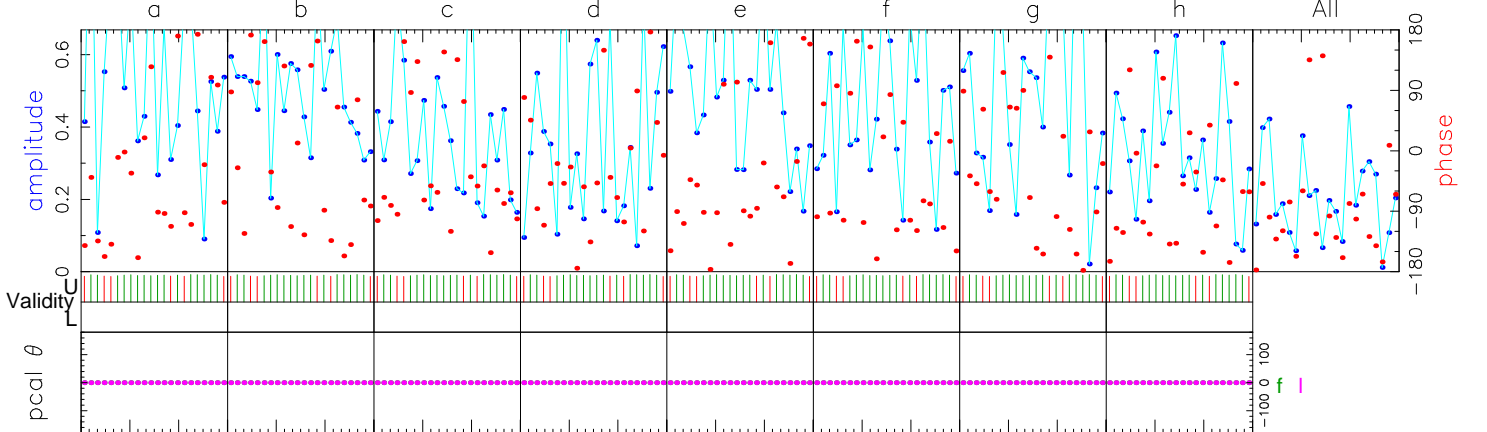
2020:014:135814

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



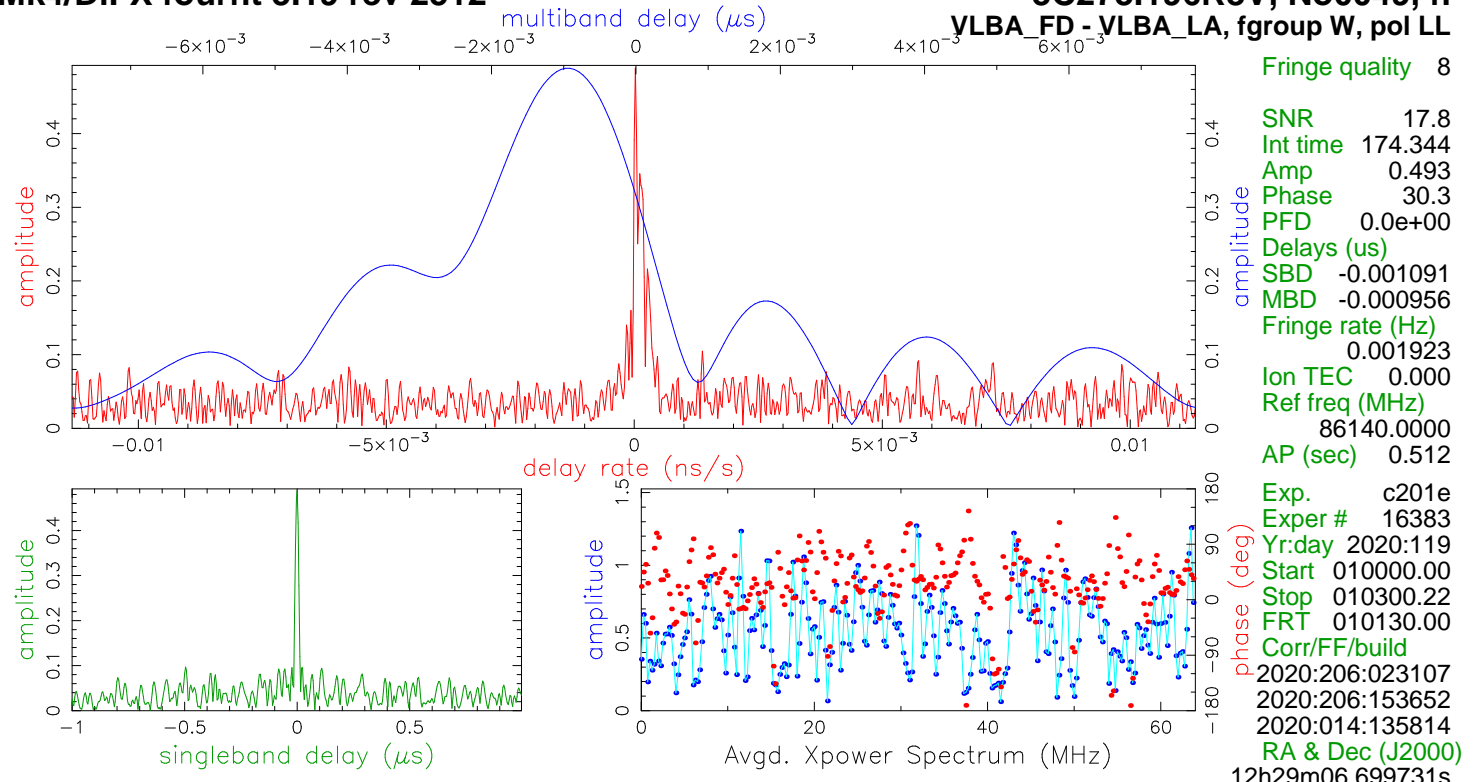
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| | -95.4 | -160.6 | -88.0 | -58.9 | -101.8 | -98.1 | -126.0 | -102.2 | Phase | -99.0 |
| | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.2 | 0.1 | 0.2 | Ampl. | 0.2 |
| | 155.3 | 273.6 | 356.0 | 420.0 | 422.4 | 150.4 | 348.1 | 200.6 | Sbd box | 421.7 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| f:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| f:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |

| | | | | | | | |
|-------------------------|-------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 1.08537818307E+03 | Apriori delay (usec) | 1.08473550778E+03 | Resid mbdelay (usec) | 2.05029E-03 | +/- | 2.0E-04 |
| Sband delay (usec) | 1.08537875328E+03 | Apriori clock (usec) | 7.6559677E+07 | Resid sbdelay (usec) | 6.43246E-01 | +/- | 1.6E-03 |
| Phase delay (usec) | 1.08473550459E+03 | Apriori clockrate (us/s) | 2.6000000E-07 | Resid phdelay (usec) | -3.19368E-06 | +/- | 6.7E-07 |
| Delay rate (us/s) | 4.07297937395E-02 | Apriori rate (us/s) | 4.07402070551E-02 | Resid rate (us/s) | -1.04133E-05 | +/- | 6.4E-09 |
| Total phase (deg) | 131.5 | Apriori accel (us/s/s) | -6.01382376241E-06 | Resid phase (deg) | -99.0 | +/- | 20.7 |

| | | | | | | | | | | | |
|--------------|----------|-------------|----------------------------|-----------------|-------|--|----------------------------|-------------------|------------------|-------|------|
| ph/seg (deg) | RMS 57.2 | Theor. 48.6 | Amplitude Search (1024X32) | 0.223 +/- 0.040 | 0.148 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 | |
| amp/seg (%) | 87.3 | 84.8 | Interp. | 0.000 | 0.225 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 | |
| ph/frq (deg) | 32.3 | 29.3 | Inc. seg. avg. | 0.225 | 0.216 | Bits/sample: 2x2 | Sample rate(MISamp/s): 128 | dr window (ns/s) | -0.011 | 0.011 | |
| amp/frq (%) | 33.5 | 51.1 | Inc. frq. avg. | 0.216 | | Data rate(Mb/s): 2048 | nlags: 256 | t_cohere infinite | ion window (TEC) | 0.00 | 0.00 |

f: az 104.6 el 26.5 pa -56.5 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) -236.707 -680.264 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/fl..196R8V Output file: /Exps/c201e/v1/1234/No0049/fl.W.135.196R8V



Fringe quality 8

SNR 17.8

Int time 174.344

Amp 0.493

Phase 30.3

PFD 0.0e+00

Delays (us)

SBD -0.001091

MBD -0.000956

Fringe rate (Hz)

0.001923

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:206:023107

2020:206:153652

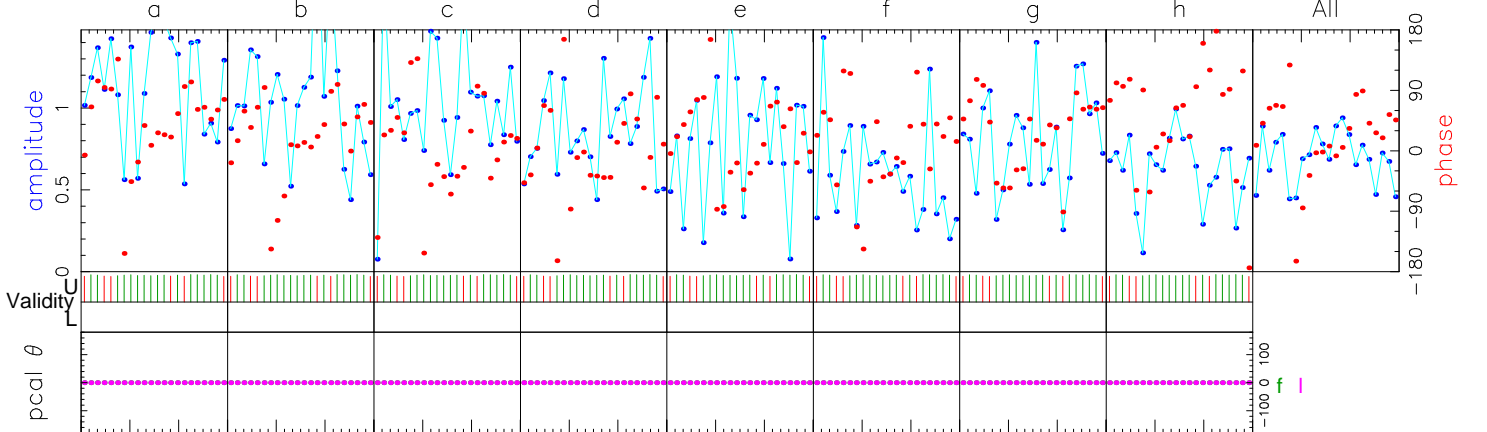
2020:014:135814

RA & Dec (J2000)

12h29m06.699731s

+02°03'08.598201"

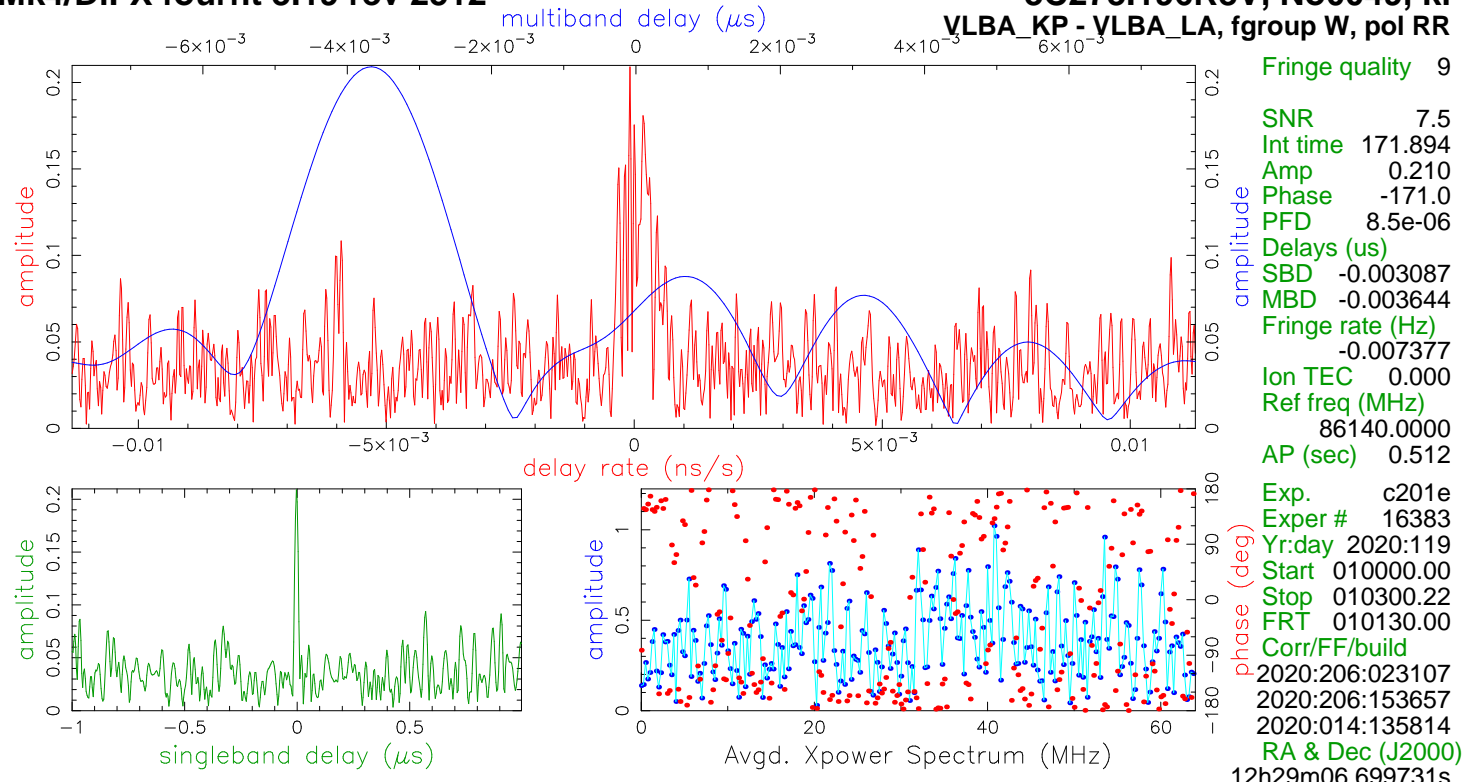
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 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 | | | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | |
| f:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | | |
| f:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | | | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | | | |
| Group delay (usec)(sbd) | | 1.08473455202E+03 | | | | 1.08473550778E+03 | | | Resid mbdelay (usec) | -9.55763E-04 | +/- 6.1E-05 | |
| Sband delay (usec) | | 1.08473441653E+03 | | | | 7.6559677E+00 | | | Resid sbdelay (usec) | -1.09125E-03 | +/- 4.8E-04 | |
| Phase delay (usec) | | 1.08473550876E+03 | | | | 2.6000000E-07 | | | Resid phdelay (usec) | 9.76885E-07 | +/- 2.1E-07 | |
| Delay rate (us/s) | | 4.07402293747E-02 | | | | 4.07402070551E-02 | | | Resid rate (us/s) | 2.23196E-08 | +/- 2.0E-09 | |
| Total phase (deg) | | | 260.9 | | | -6.01382376241E-06 | | | Resid phase (deg) | 30.3 | +/- 6.4 | |
| ph/seg (deg) | RMS 57.0 | Theor. 15.1 | Amplitude 15.1 | 0.493 +/- 0.028 | | PCal mode: MANUAL, MANUAL | | | PC period (AP's) 5, 5 | | | |
| amp/seg (%) | 52.3 | 26.4 | Search (1024X32) | 0.488 | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | | | sb window (us) | -1.000 | 1.000 | |
| ph/frq (deg) | 28.2 | 9.1 | Interp. | 0.000 | | Bits/sample: 2x2 | | | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 |
| amp/frq (%) | 32.8 | 15.9 | Inc. seg. avg. | 0.676 | | Sample rate(MISamp/s): 128 | | | dr window (ns/s) | -0.011 | 0.011 | |
| | | | Inc. frq. avg. | 0.524 | | Data rate(Mb/s): 2048 | | | ion window (TEC) | 0.00 | 0.00 | |
| f: az 104.6 el 26.5 pa -56.5 | | | l: az 105.4 el 23.4 pa -51.4 | | | u,v (fr/asec) -236.707 -680.264 | | | | | | |

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196R8V, No0049, kl
VLBA_KP - VLBA_LA, fgroup W, pol RR



Fringe quality 9

SNR 7.5

Int time 171.894

Amplitude 0.210

Phase -171.0

PFD 8.5e-06

Delays (us)

SBD -0.003087

MBD -0.003644

Fringe rate (Hz)

-0.007377

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:206:023107

2020:206:153657

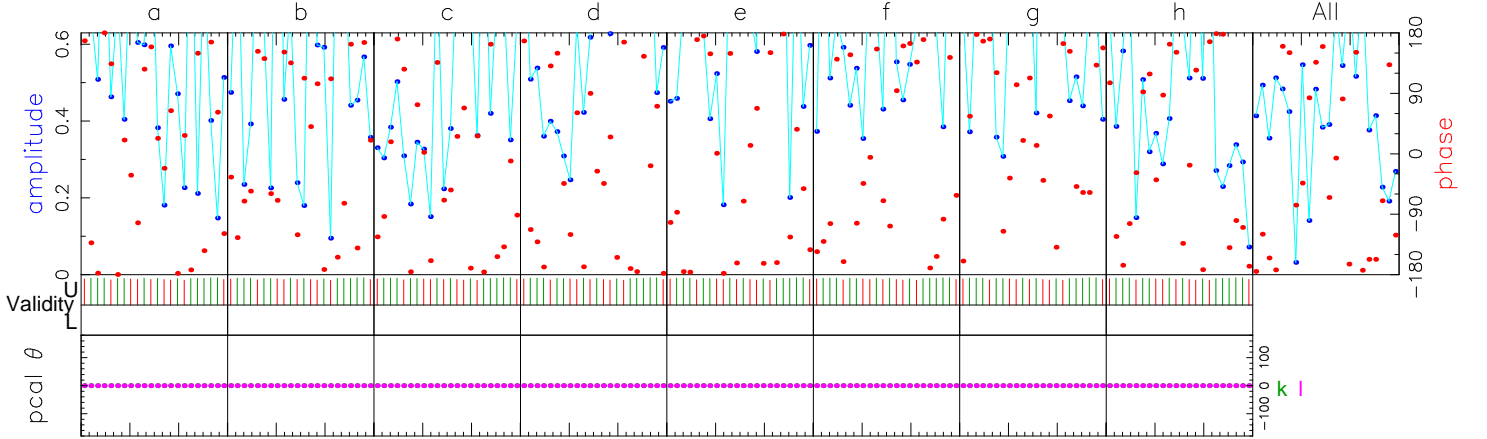
2020:014:135814

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 | |
|-------------------------|--------------------|----------|----------|----------|----------|--------------------|----------|----------|----------------------|--------------|-------------|
| | -179.8 | -152.7 | -172.1 | -170.1 | -172.0 | -157.4 | 162.1 | 177.8 | Phase | -171.0 | |
| | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.2 | Ampl. | 0.2 | |
| | 3.2 | 425.9 | 130.9 | 179.0 | 256.3 | 256.3 | 229.2 | 257.4 | Sbd box | 256.2 | |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| k:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | |
| k:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | | |
| | | | | | | | | | Chan ids | | |
| | | | | | | | | | Tracks | | |
| Group delay (usec)(sbd) | -1.19443520462E+03 | | | | | -1.19443156042E+03 | | | Resid mbdelay (usec) | -3.64420E-03 | +/- 1.4E-04 |
| Sband delay (usec) | -1.19443464742E+03 | | | | | 3.3944943E+00 | | | Resid sbdelay (usec) | -3.08700E-03 | +/- 1.1E-03 |
| Phase delay (usec) | -1.19443156594E+03 | | | | | 1.5640000E-07 | | | Resid phdelay (usec) | -5.51549E-06 | +/- 4.9E-07 |
| Delay rate (us/s) | 1.03483748708E-01 | | | | | 1.03483834343E-01 | | | Resid rate (us/s) | -8.56349E-08 | +/- 4.7E-09 |
| Total phase (deg) | | | -32.3 | | | 6.15765768015E-06 | | | Resid phase (deg) | -171.0 | +/- 15.2 |

ph/seg (deg) 71.4 35.7 Amplitude 0.210 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 134.4 62.3 Search (1024X32) 0.203 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

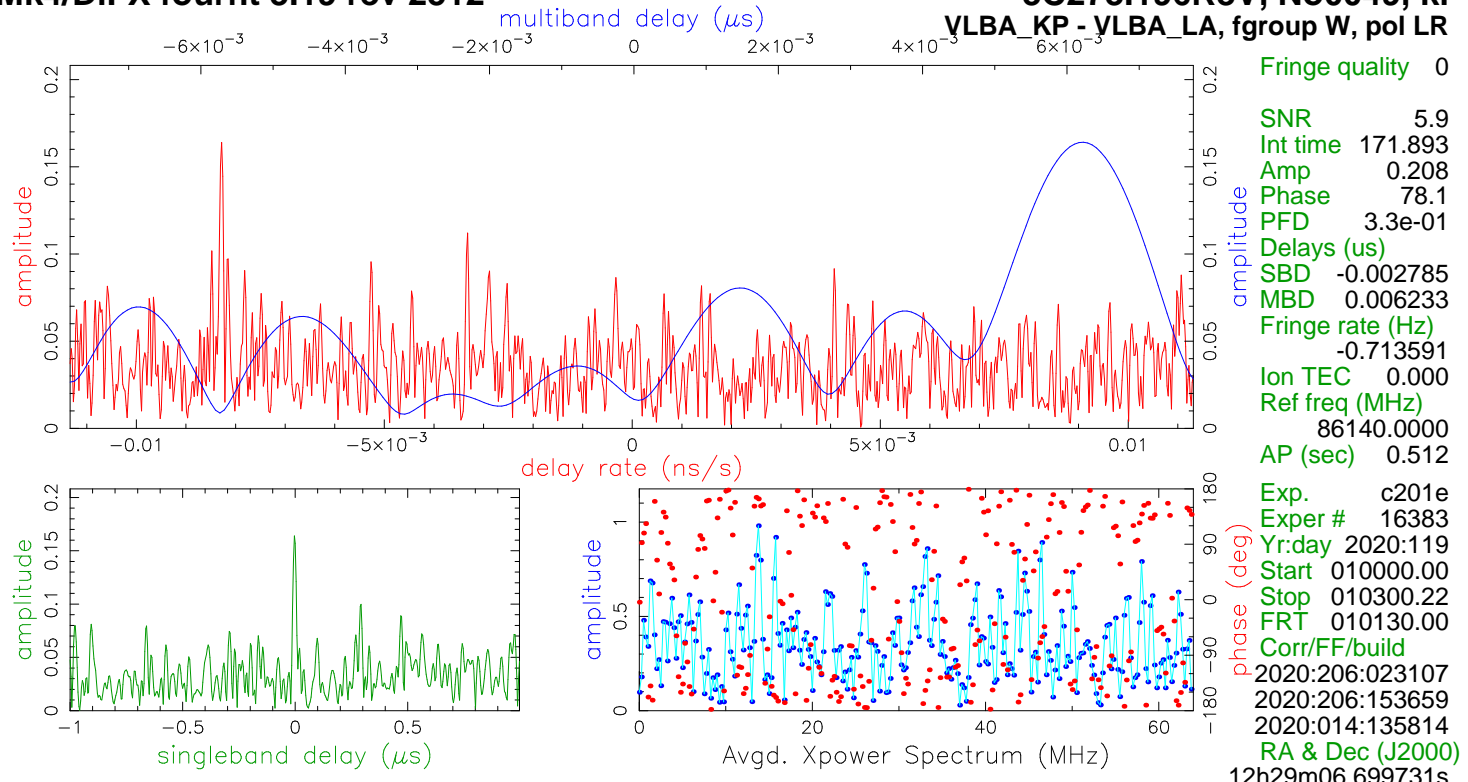
ph/frq (deg) 15.5 21.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 45.1 37.6 Inc. seg. avg. 0.357 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

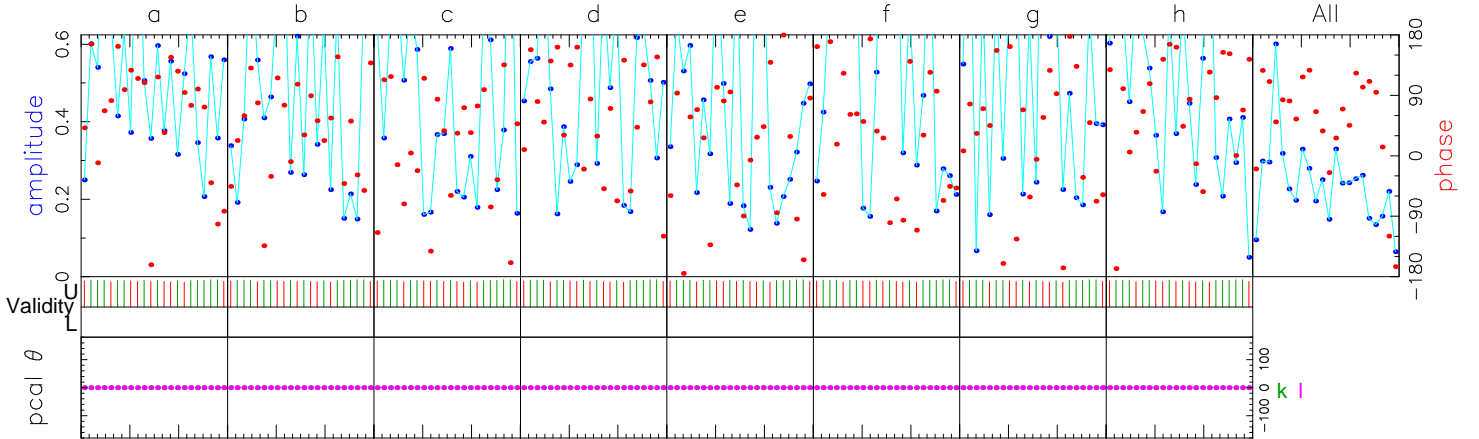
amp/frq (%) 45.1 37.6 Inc. frq. avg. 0.199 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 100.5 el 19.9 pa -56.5 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) -589.968 -473.114 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/kl..196R8V Output file: /Exps/c201e/v1/1234/No0049/kl.W.116.196R8V

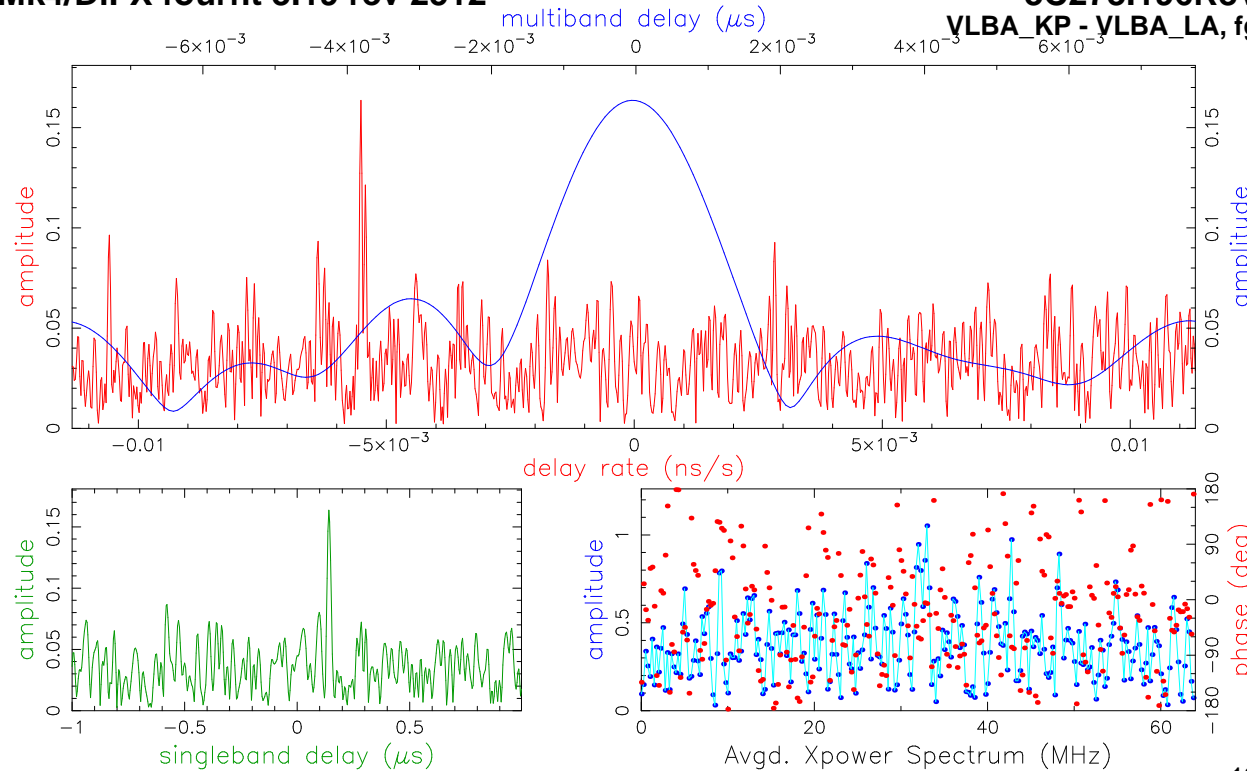


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--|--------------------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -1.19444095205E+03 | | | | | | | | | |
| Sband delay (usec) | -1.19443434517E+03 | | | | | | | | | |
| Phase delay (usec) | -1.19443155790E+03 | | | | | | | | | |
| Delay rate (us/s) | 1.03475550259E-01 | | | | | | | | | |
| Total phase (deg) | | | -143.2 | | | | | | | |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| nlags: 256 | | | | | | | | | | |
| t_cohere infinite | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | |

k: az 100.5 el 19.9 pa -56.5 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) -589.968 -473.114
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/kl..196R8V Output file: /Exps/c201e/v1/1234/No0049/kl.W.132.196R8V

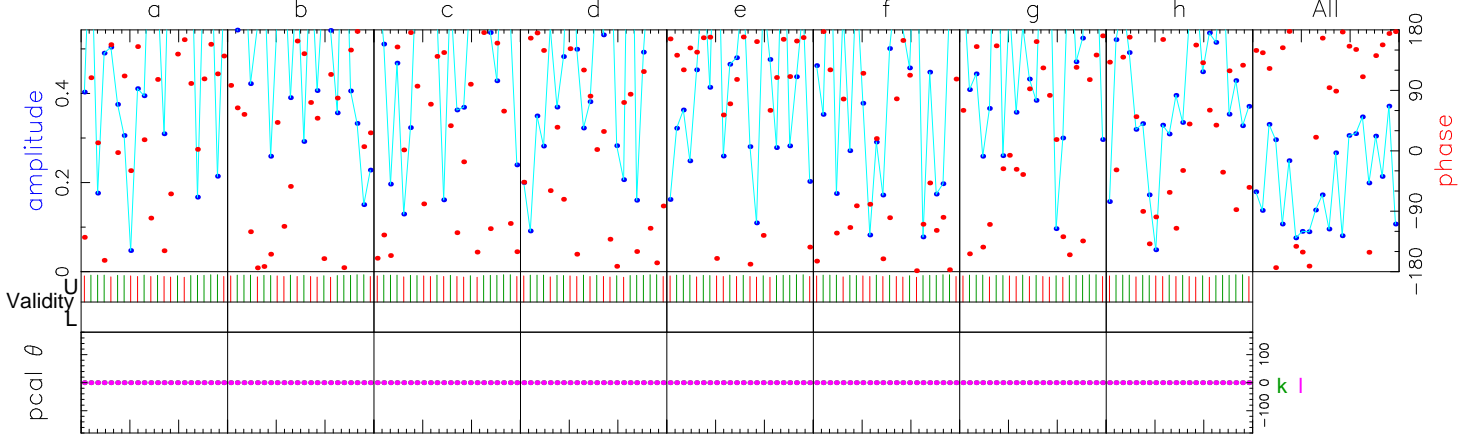


Fringe quality 0

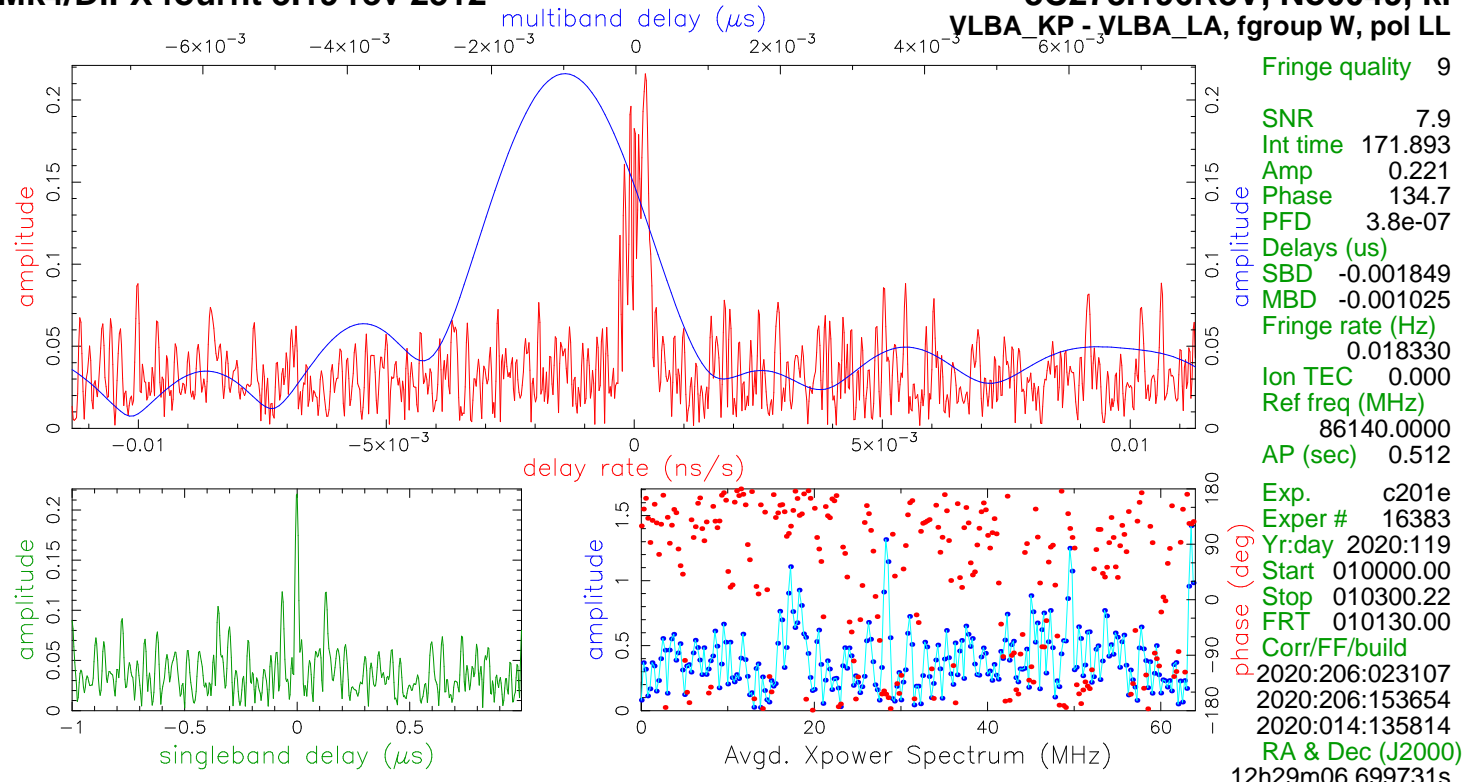
SNR 5.9
Int time 171.894
Amp 0.181
Phase 152.8
PFD 4.2e-01
Delays (us)
SBD 0.141166
MBD -0.000059
Fringe rate (Hz)
-0.476186
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153701
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

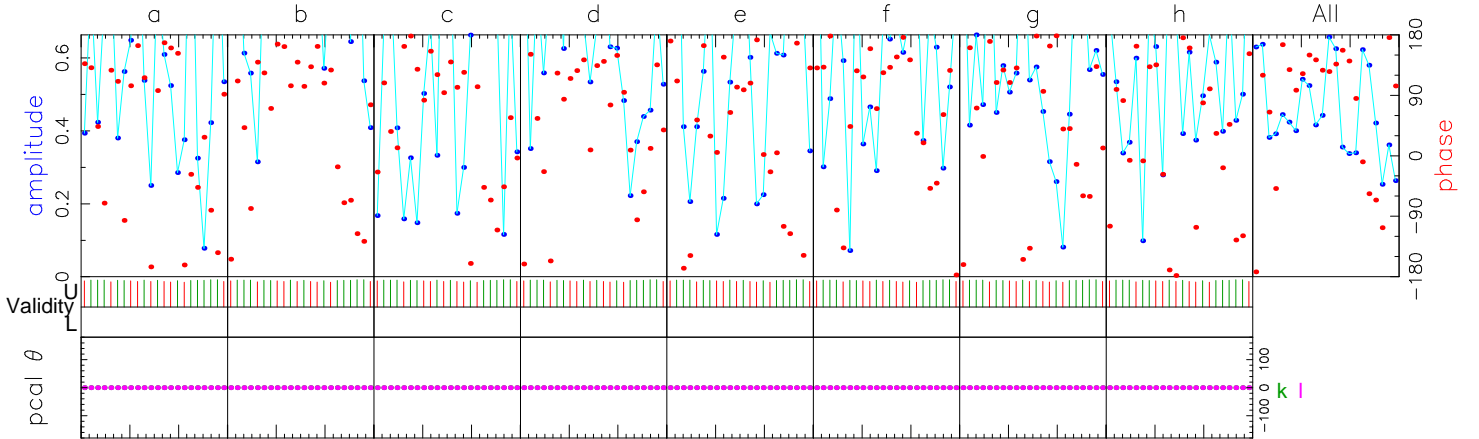
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 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 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -1.19429099480E+03 | | | | | | | | | |
| Sband delay (usec) | -1.19429039442E+03 | | | | | | | | | |
| Phase delay (usec) | -1.19443155549E+03 | | | | | | | | | |
| Delay rate (us/s) | 1.03478306293E-01 | | | | | | | | | |
| Total phase (deg) | | | -68.4 | | | | | | | |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| Amplitude | 0.181 +/- 0.031 | | | | | | | | | |
| Search (1024X32) | 0.157 | | | | | | | | | |
| Interp. | 0.000 | | | | | | | | | |
| Inc. seg. avg. | 0.171 | | | | | | | | | |
| Inc. frq. avg. | 0.169 | | | | | | | | | |
| 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 | | | | | | | | |

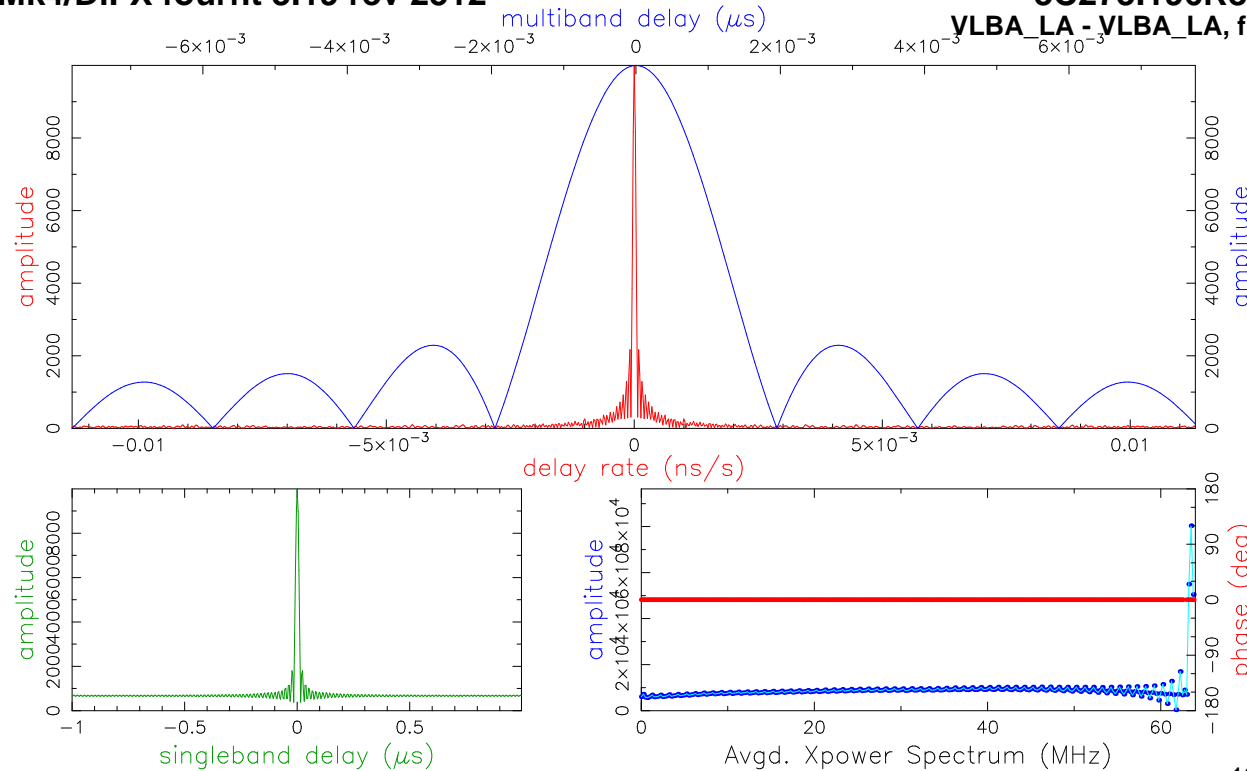


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



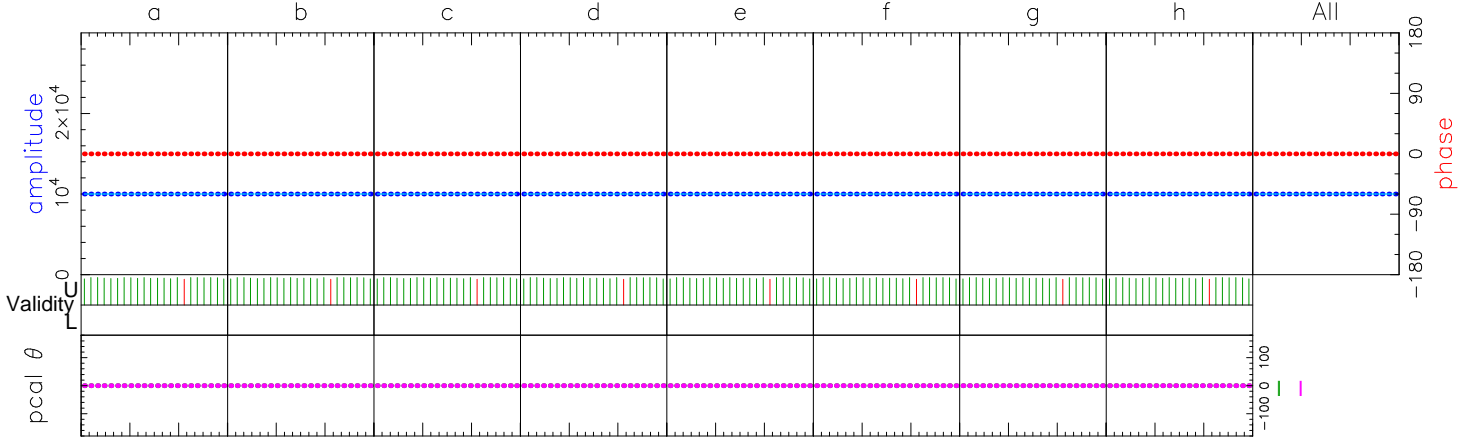
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|-----------|----------|----------|--------------------|----------|----------|----------|--------------|-------------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| k:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| k:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -1.19443258502E+03 | | | | -1.19443156042E+03 | | | | | |
| Sband delay (usec) | -1.19443340967E+03 | | | | 3.3944943E+00 | | | | | |
| Phase delay (usec) | -1.19443155608E+03 | | | | 1.5640000E-07 | | | | | |
| Delay rate (us/s) | 1.03484047137E-01 | | | | 1.03483834343E-01 | | | | | |
| Total phase (deg) | | | -86.5 | | 6.15765768015E-06 | | | | 134.7 | +/- 14.5 |
| Apriori delay (usec) | | | | | | | | | -1.02460E-03 | +/- 1.4E-04 |
| Apriori clock (usec) | | | | | 0.217 | | | | -1.84925E-03 | +/- 1.1E-03 |
| Apriori clockrate (us/s) | | | | | 0.000E+00 | | | | 4.34472E-06 | +/- 4.7E-07 |
| Apriori rate (us/s) | | | | | 1.03483834343E-01 | | | | 2.12794E-07 | +/- 4.5E-09 |
| Apriori accel (us/s/s) | | | | | 6.15765768015E-06 | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: | MANUAL | MANUAL | | | MANUAL | | | | | |
| Pcal rate: | 0.000E+00 | 0.000E+00 | | | 0.000E+00 | | | | | |
| Bits/sample: | 2x2 | | | | | | | | | |
| Sample rate (MSamp/s): | 128 | | | | | | | | | |
| Data rate (Mb/s): | 2048 | | | | | | | | | |
| PC period (AP's) | 5 | | | | 5 | | | | | |
| sb window (us) | -1.000 | 1.000 | | | | | | | | |
| mb window (us) | -0.008 | 0.008 | | | | | | | | |
| dr window (ns/s) | -0.011 | 0.011 | | | | | | | | |
| ion window (TEC) | 0.00 | 0.00 | | | | | | | | |

ph/seg (deg) 79.3 33.9 Search (1024X32) 0.221 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 120.3 59.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.3 20.4 Inc. seg. avg. 0.389 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.6 35.7 Inc. frq. avg. 0.212 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 100.5 el 19.9 pa -56.5 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) -589.968 -473.114 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/kl..196R8V Output file: /Exps/c201e/v1/1234/No0049/kl.W.99.196R8V



Fringe quality 9
 SNR 363509.2
 Int time 176.700
 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
 Exper # 16383
 Yr:day 2020:119
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:206:023107
 2020:206:153702
 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

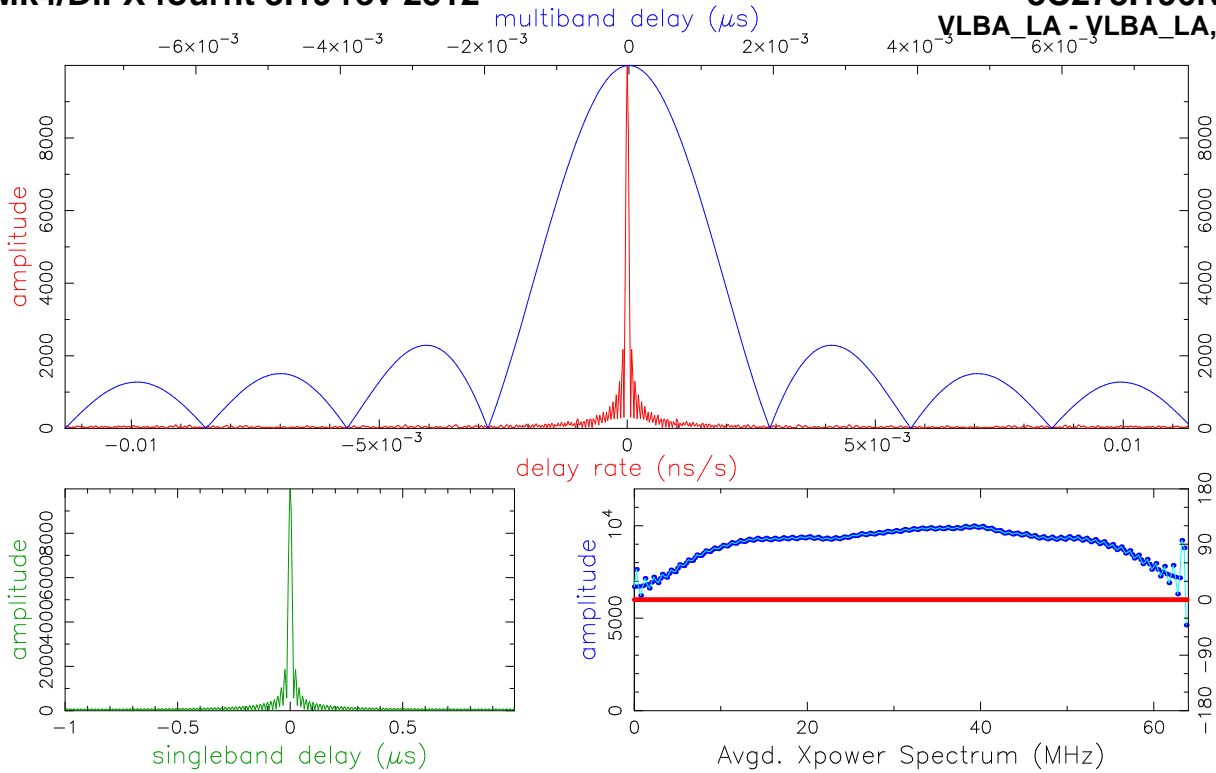


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |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

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08
 Phase delay (usec) 5.76939469749E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 5.76939E-19 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.8E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.028 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

l: az 105.4 el 23.4 pa -51.4 l: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/ll..196R8V Output file: /Exps/c201e/v1/1234/No0049/ll.W.151.196R8V

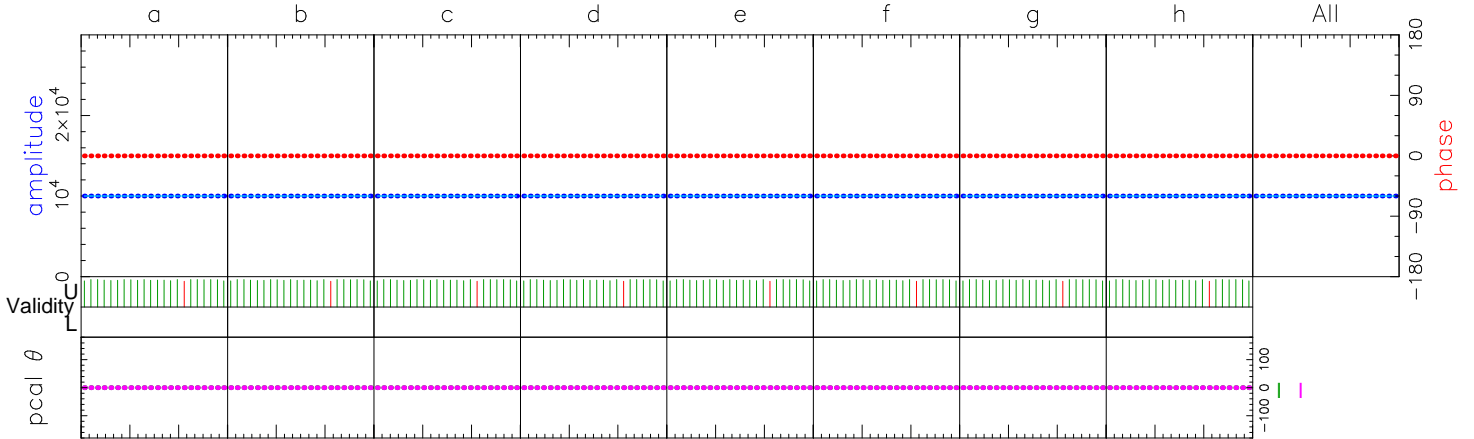


Fringe quality 9

SNR 363509.4
Int time 176.700
Amp 9999.997
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 010130.00
Corr/FF/build
2020:206:023107
2020:206:153708
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

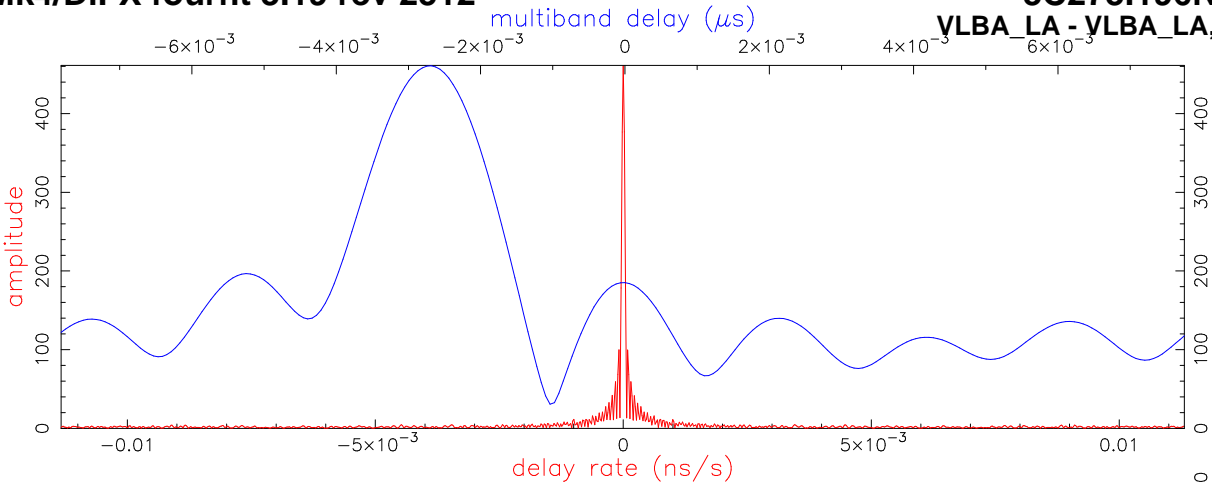


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------|-------------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l:l | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | | +/- 3.0E-09 |
| Sband delay (usec) | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | | +/- 2.4E-08 |
| Phase delay (usec) | -3.95566788501E-20 | -3.95566788501E-20 | -3.95566788501E-20 | -3.95566788501E-20 | -3.95566788501E-20 | -3.95566788501E-20 | -3.95566788501E-20 | -3.95566788501E-20 | | +/- 1.0E-11 |
| Delay rate (us/s) | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | | +/- 9.8E-14 |
| Total phase (deg) | | | -0.0 | | | | | | | +/- 0.0 |

RMS Theor. Amplitude 9999.997 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.997 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. 9999.997 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

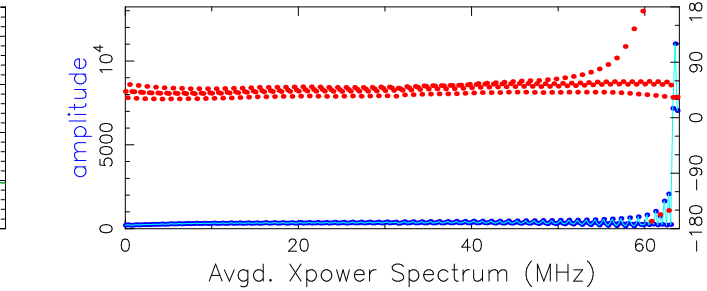
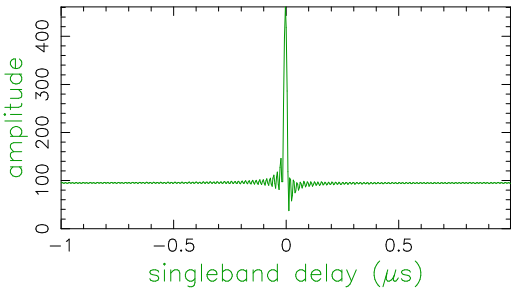
l: az 105.4 el 23.4 pa -51.4 u, v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/II..196R8V Output file: /Exps/c201e/v1/1234/No0049/II.W.186.196R8V



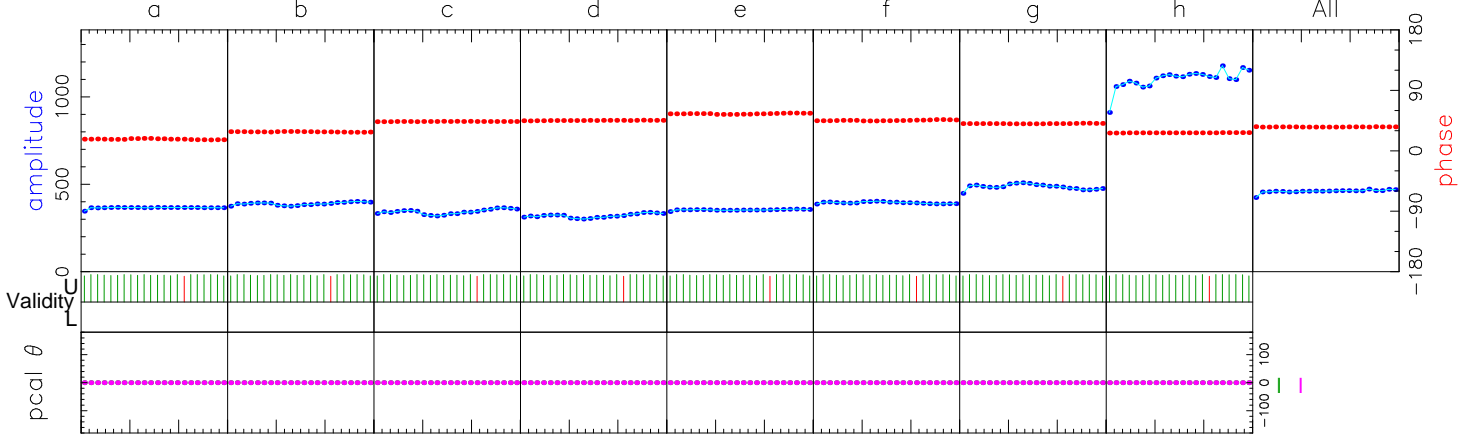
Fringe quality 6

SNR 16769.8
Int time 176.700
Amp 461.330
Phase 35.5
PFD 0.0e+00
Delays (us)
SBD -0.003506
MBD -0.002714
Fringe rate (Hz)
-0.000001
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

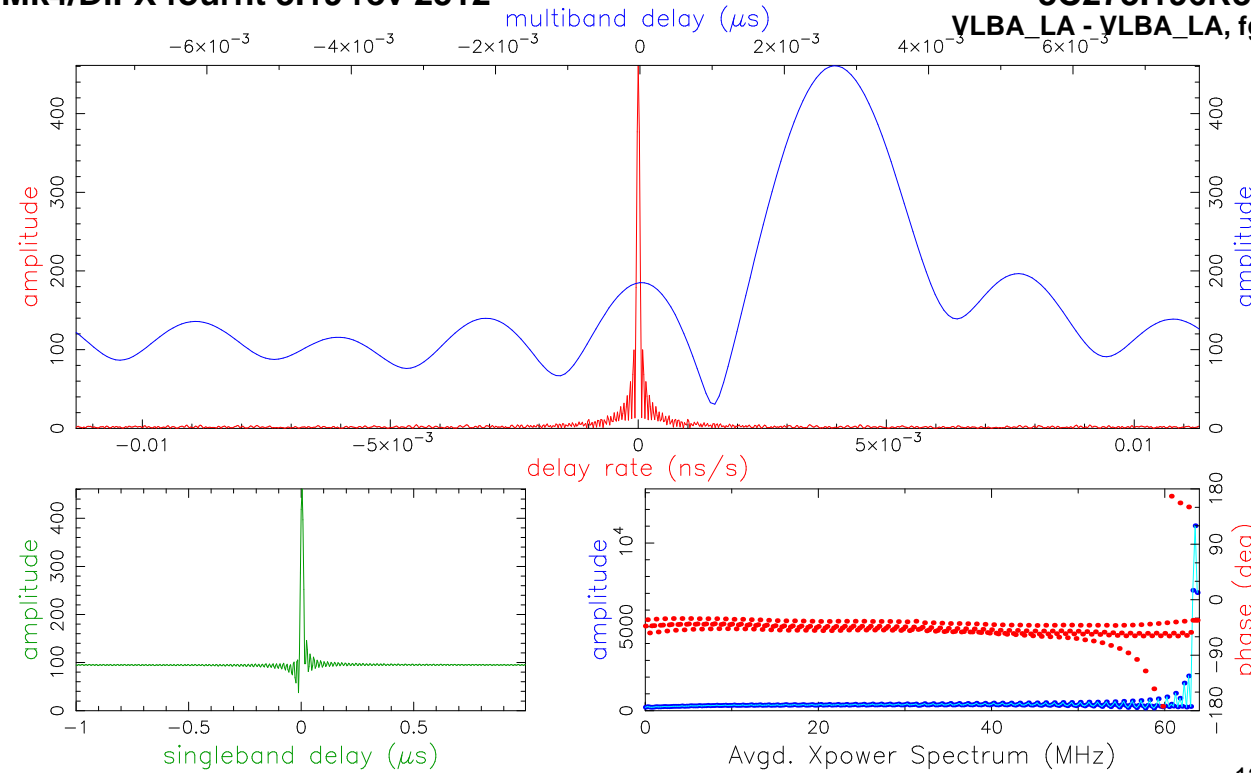


Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153710
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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 | | |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | APs used | 1000 |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | 1000 |
| : | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | 0:0 |
| : | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | 0:0 |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | 1000 |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | 1000 |
| | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -2.7140000000E-03 | | | | | | | | Resid mbdelay (usec) | -2.71400E-03 +/- 6.5E-08 |
| Sband delay (usec) | -3.5055000000E-03 | | | | | | | | Resid sbdelay (usec) | -3.50550E-03 +/- 5.1E-07 |
| Phase delay (usec) | 1.14322381714E-06 | | | | | | | | Resid phdelay (usec) | 1.14322E-06 +/- 2.2E-10 |
| Delay rate (us/s) | -1.70053828700E-11 | | | | | | | | Resid rate (us/s) | -1.70054E-11 +/- 2.1E-12 |
| Total phase (deg) | | | 35.5 | | | | | | Resid phase (deg) | 35.5 +/- 0.0 |
| | RMS | Theor. | Amplitude | 461.330 +/- 0.028 | | | | | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| ph/seg (deg) | 0.1 | 0.0 | Search (1024X32) | 449.180 | | | | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 1.9 | 0.0 | Interp. | 0.000 | | | | | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 13.7 | 0.0 | Inc. seg. avg. | 460.749 | | | | | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 52.8 | 0.0 | Inc. frq. avg. | 469.540 | | | | | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |
| l: az 105.4 el 23.4 pa -51.4 i: az 105.4 el 23.4 pa -51.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator | | | | | | | | | | |

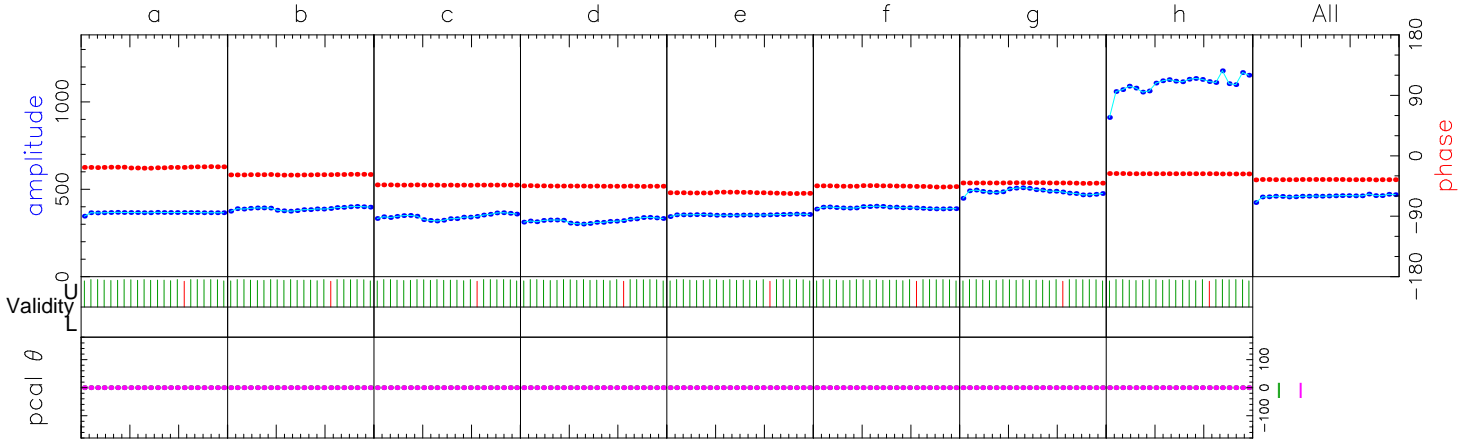


Fringe quality 6

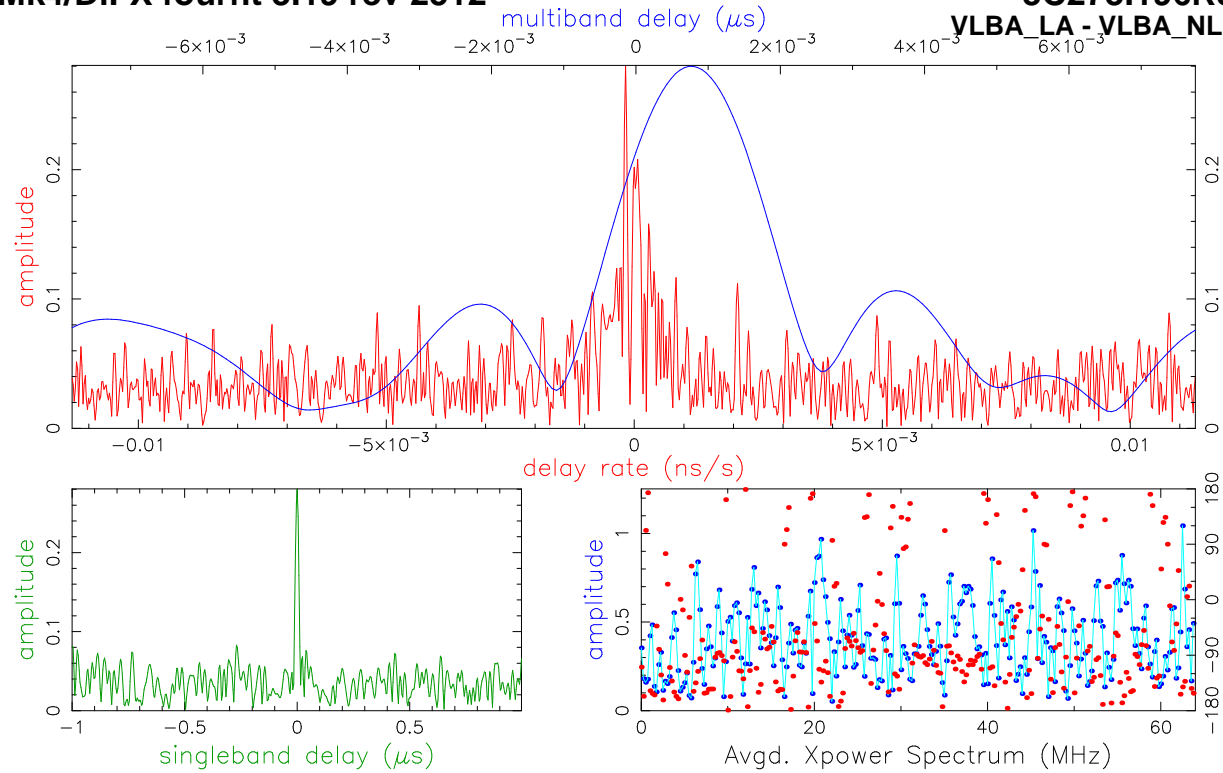
SNR 16769.7
Int time 176.700
Amp 461.329
Phase -35.5
PFD 0.0e+00
Delays (us)
SBD 0.003506
MBD 0.002714
Fringe rate (Hz) 0.000001
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153712
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

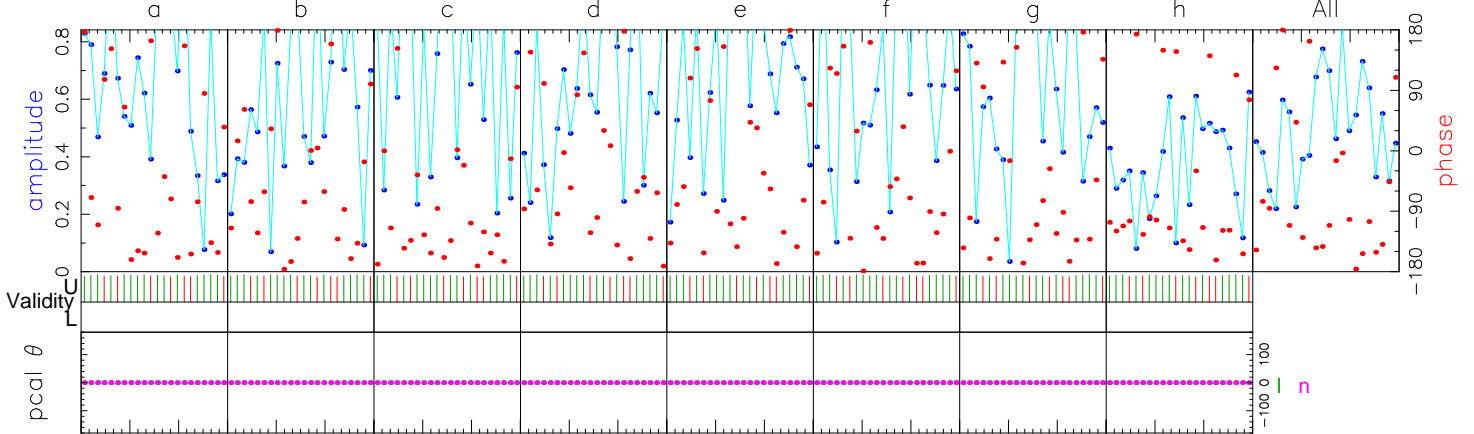


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|------------------|-------------------|----------|----------|----------|----------|--|-------------------------------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | APs used | |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| : | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| : | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 2.7140000000E-03 | | | | | | | | 2.71400E-03 | +/- 6.5E-08 |
| Sband delay (usec) | 3.5055000000E-03 | | | | | | | | 3.50550E-03 | +/- 5.1E-07 |
| Phase delay (usec) | -1.14322381726E-06 | | | | | | | | -1.14322E-06 | +/- 2.2E-10 |
| Delay rate (us/s) | 1.70053828700E-11 | | | | | | | | 1.70054E-11 | +/- 2.1E-12 |
| Total phase (deg) | | | -35.5 | | | | | | -35.5 | +/- 0.0 |
| | RMS | Theor. | Amplitude | 461.329 +/- 0.028 | | | | | PCal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| ph/seg (deg) | 0.1 | 0.0 | Search (1024X32) | 449.179 | | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 1.9 | 0.0 | Interp. | 0.000 | | | | | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 13.7 | 0.0 | Inc. seg. avg. | 460.748 | | | | | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 52.8 | 0.0 | Inc. frq. avg. | 469.539 | | | | | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |
| | | | | | | | | | nlags: 256 | t_cohere infinite |



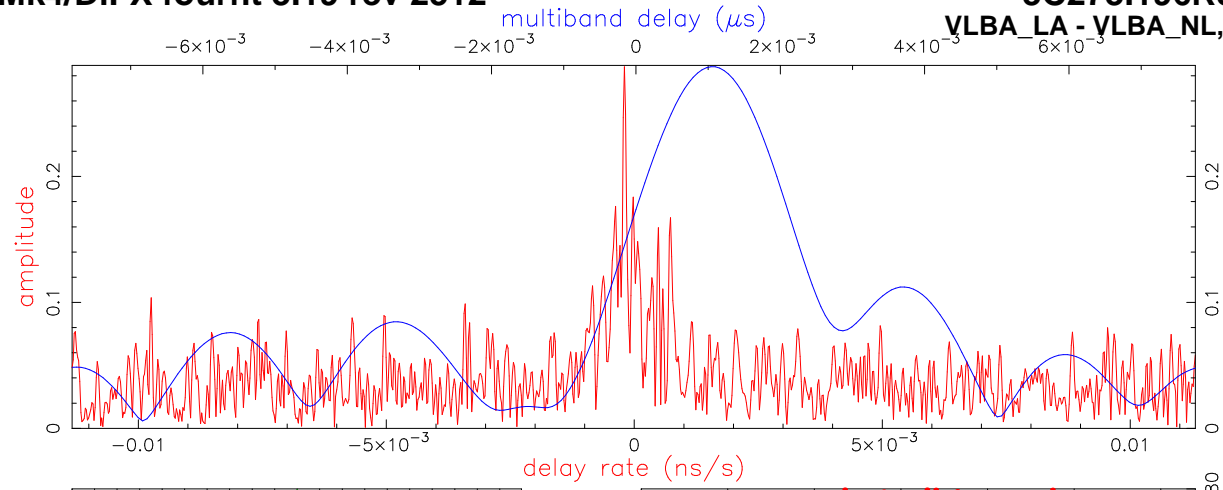
Fringe quality 9
 SNR 10.1
 Int time 173.668
 Amp 0.281
 Phase -128.6
 PFD 1.1e-15
 Delays (us)
 SBD -0.000622
 MBD 0.000748
 Fringe rate (Hz)
 -0.015530
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:206:023107
 2020:206:153700
 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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -2.74528137532E+03 | -2.74528274508E+03 | -2.74528212747E+03 | -2.74528137532E+03 | -2.74528212333E+03 | -2.74528212333E+03 | -2.74528212333E+03 | -2.74528212333E+03 | 7.48009E-04 | +/- 1.1E-04 |
| Sband delay (usec) | -2.74528274508E+03 | -2.74528274508E+03 | -2.74528274508E+03 | -2.74528274508E+03 | -2.74528274508E+03 | -2.74528274508E+03 | -2.74528274508E+03 | -2.74528274508E+03 | -6.21750E-04 | +/- 8.5E-04 |
| Phase delay (usec) | -2.74528212747E+03 | -2.74528212747E+03 | -2.74528212747E+03 | -2.74528212747E+03 | -2.74528212747E+03 | -2.74528212747E+03 | -2.74528212747E+03 | -2.74528212747E+03 | -4.14804E-06 | +/- 3.7E-07 |
| Delay rate (us/s) | 2.60986759614E-01 | 2.60986759614E-01 | 2.60986759614E-01 | 2.60986759614E-01 | 2.60986759614E-01 | 2.60986759614E-01 | 2.60986759614E-01 | 2.60986759614E-01 | -1.80292E-07 | +/- 3.5E-09 |
| Total phase (deg) | | | -165.8 | | 1.40949013018E-05 | | | | -128.6 | +/- 11.3 |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| PCal mode: MANUAL, MANUAL | | | | | | | | | | |
| PCal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| nlags: 256 | | | | | | | | | | |
| t_cohere infinite | | | | | | | | | | |
| sb window (us) | | | | | | | | | -1.000 | 1.000 |
| mb window (us) | | | | | | | | | -0.008 | 0.008 |
| dr window (ns/s) | | | | | | | | | -0.011 | 0.011 |
| ion window (TEC) | | | | | | | | | 0.00 | 0.00 |

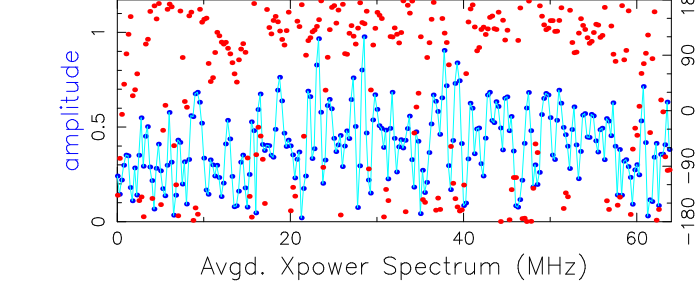
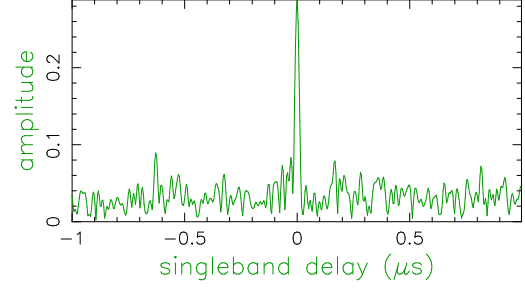
ph/seg (deg) 70.4 26.6 Search (1024X32) 0.274 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 100.1 46.4 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.1 16.0 Inc. seg. avg. 0.453 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.7 28.0 Inc. frq. avg. 0.281 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 105.4 el 23.4 pa -51.4 n: az 119.8 el 31.6 pa -40.3 u,v (fr/asec) -1488.524 -682.563 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/In..196R8V Output file: /Exps/c201e/v1/1234/No0049/In.W.140.196R8V



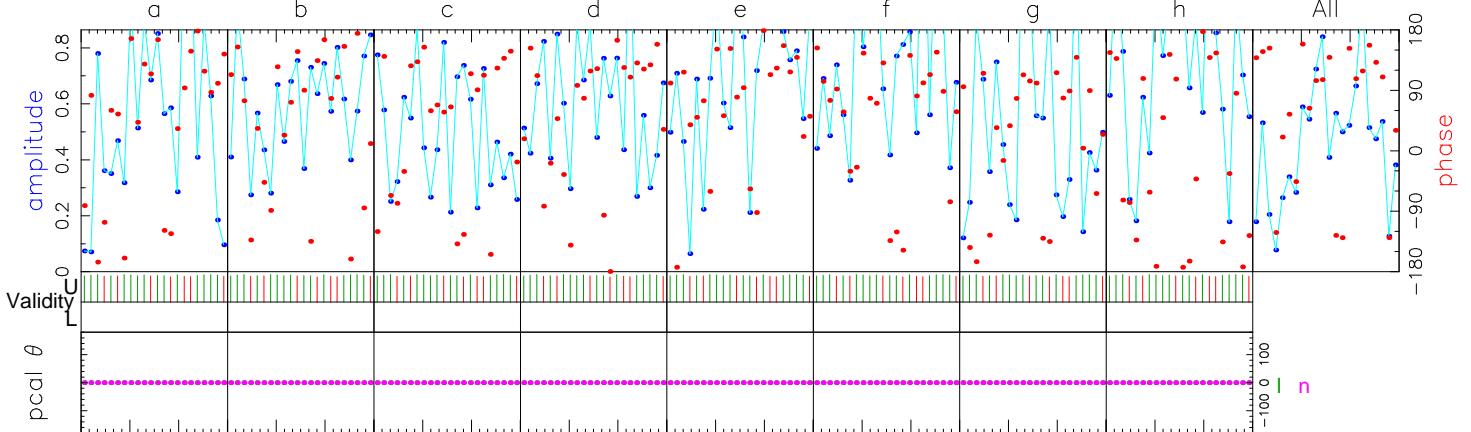
Fringe quality 9

SNR 10.4
 Int time 173.668
 Amp 0.288
 Phase 125.9
 PFD 6.4e-17
 Delays (us)
 SBD -0.000851
 MBD 0.001042
 Fringe rate (Hz) -0.016773
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build 2020:206:023107
 2020:206:153702
 2020:014:135814
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"



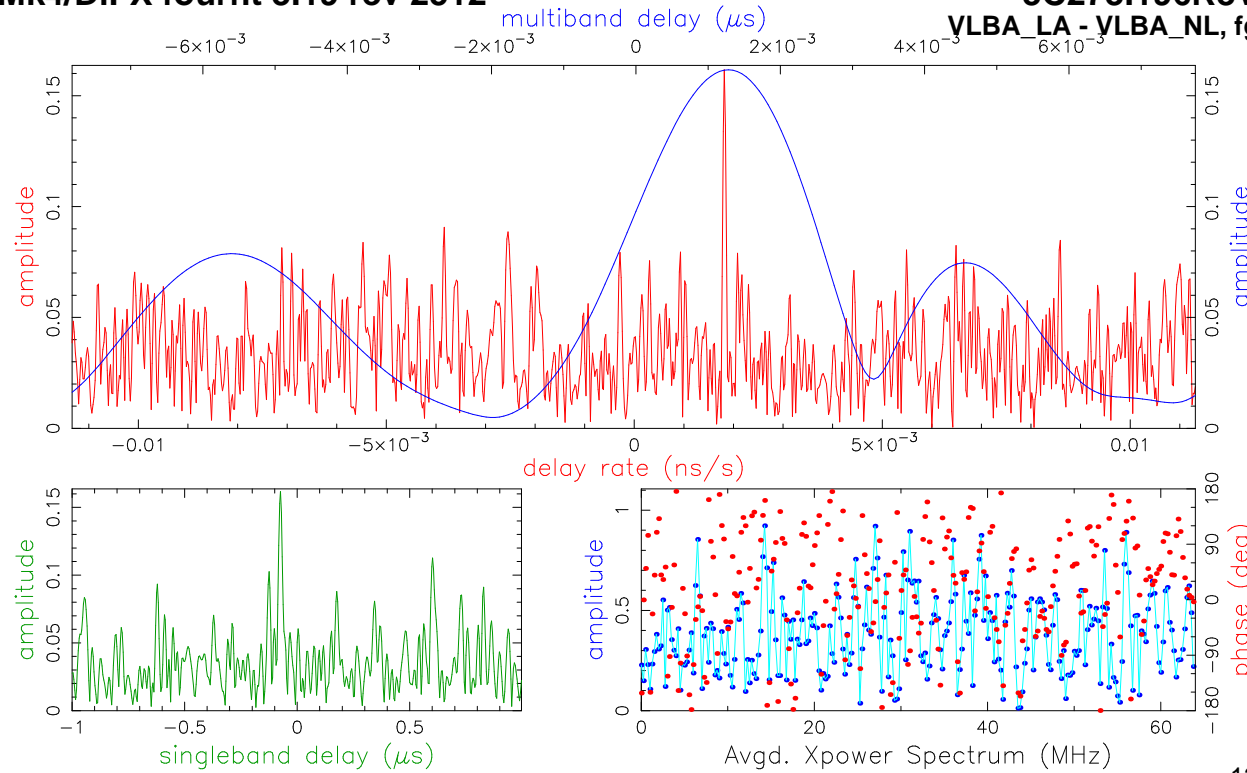
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |

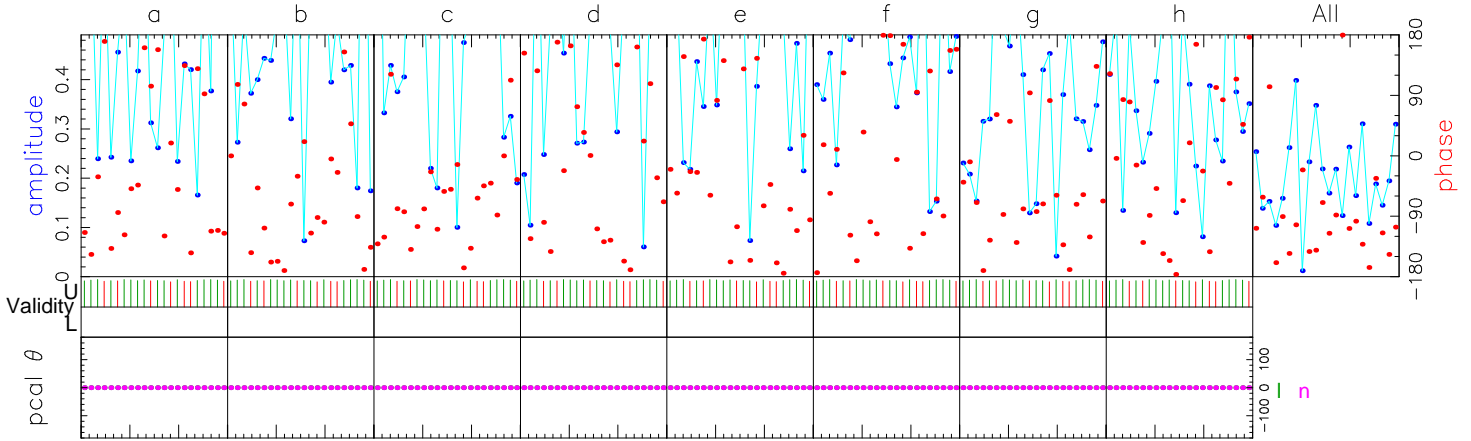
Group delay (usec)(sbd) -2.74528108099E+03 Apriori delay (usec) -2.74528212333E+03 Resid mbdelay (usec) 1.04233E-03 +/- 1.0E-04
 Sband delay (usec) -2.74528297433E+03 Apriori clock (usec) -3.6069981E+01 Resid sbdelay (usec) -8.51000E-04 +/- 8.3E-04
 Phase delay (usec) -2.74528211926E+03 Apriori clockrate (us/s) -4.8500001E-07 Resid phdelay (usec) 4.06111E-06 +/- 3.6E-07
 Delay rate (us/s) 2.60986745189E-01 Apriori rate (us/s) 2.60986939907E-01 Resid rate (us/s) -1.94717E-07 +/- 3.4E-09
 Total phase (deg) 88.8 Apriori accel (us/s/s) 1.40949013018E-05 Resid phase (deg) 125.9 +/- 11.0

ph/seg (deg) 71.0 25.9 Search (1024X32) 0.284 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 97.9 45.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.5 15.6 Inc. seg. avg. 0.422 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 28.5 27.2 Inc. frq. avg. 0.290 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 105.4 el 23.4 pa -51.4 n: az 119.8 el 31.6 pa -40.3 u,v (fr/asec) -1488.524 -682.563 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/In..196R8V Output file: /Exps/c201e/v1/1234/No0049/In.W.152.196R8V

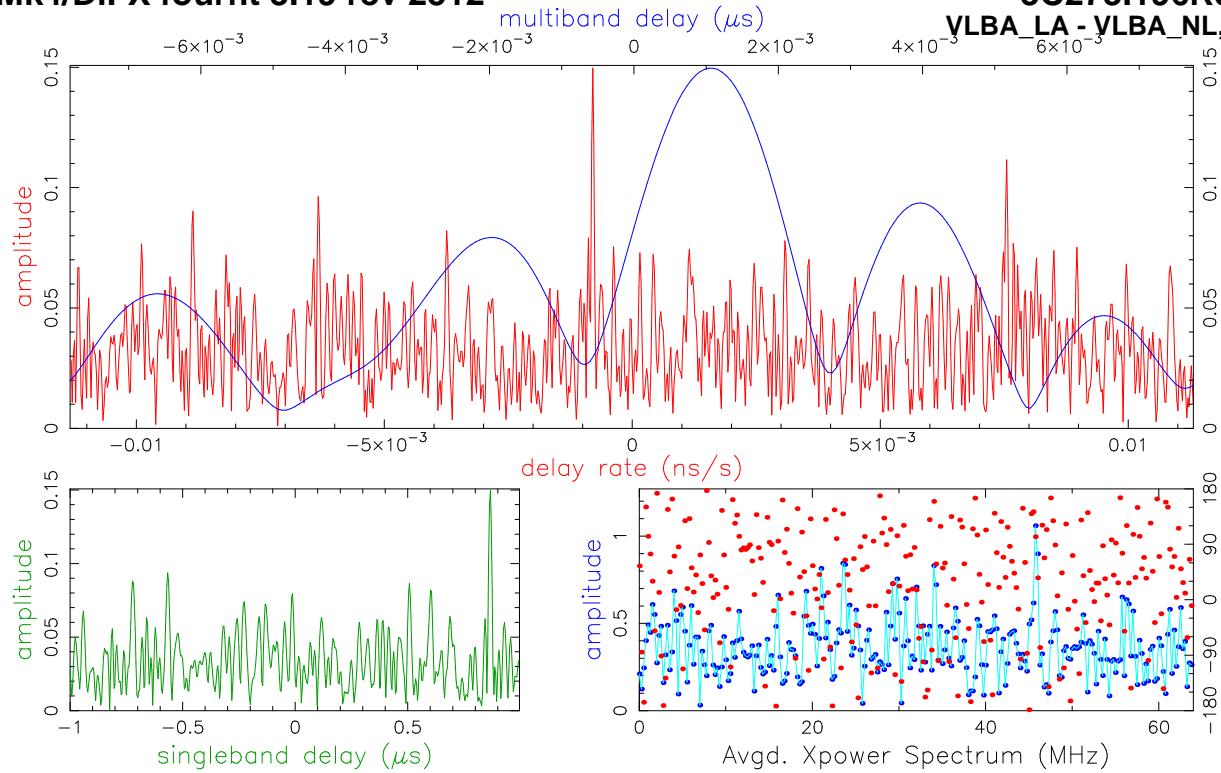


Fringe quality 0
 SNR 5.8
 Int time 173.668
 Amp 0.164
 Phase -115.9
 PFD 4.9e-01
 Delays (us)
 SBD -0.074800
 MBD 0.001266
 Fringe rate (Hz)
 0.156105
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:206:023107
 2020:206:153705
 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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -2.74535898210E+03 | -2.74535692283E+03 | -2.74528212706E+03 | -2.74528212333E+03 | -2.74528212333E+03 | -2.74528212333E+03 | -2.74528212333E+03 | -2.74528212333E+03 | 1.26623E-03 | +/- 1.9E-04 |
| Sband delay (usec) | -132.6 | -108.7 | -85.2 | -163.3 | -113.3 | -142.1 | -92.9 | -73.1 | -7.47995E-02 | +/- 1.5E-03 |
| Phase delay (usec) | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | -3.73631E-06 | +/- 6.3E-07 |
| Delay rate (us/s) | 131.6 | 376.6 | 238.4 | 225.1 | 163.6 | 350.6 | 410.4 | 472.4 | 1.81222E-06 | +/- 6.1E-09 |
| Total phase (deg) | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | -115.9 | +/- 19.6 |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | |

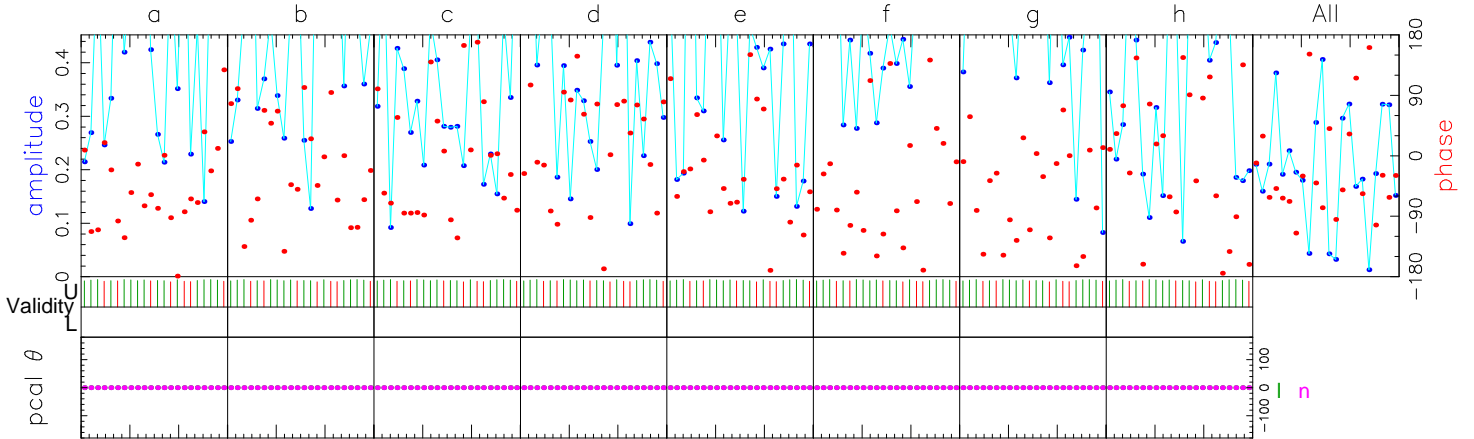


Fringe quality 0

SNR 5.4
 Int time 173.668
 Amp 0.151
 Phase -46.9
 PFD 1.0e+00
 Delays (us)
 SBD 0.866302
 MBD 0.001036
 Fringe rate (Hz) -0.068909
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

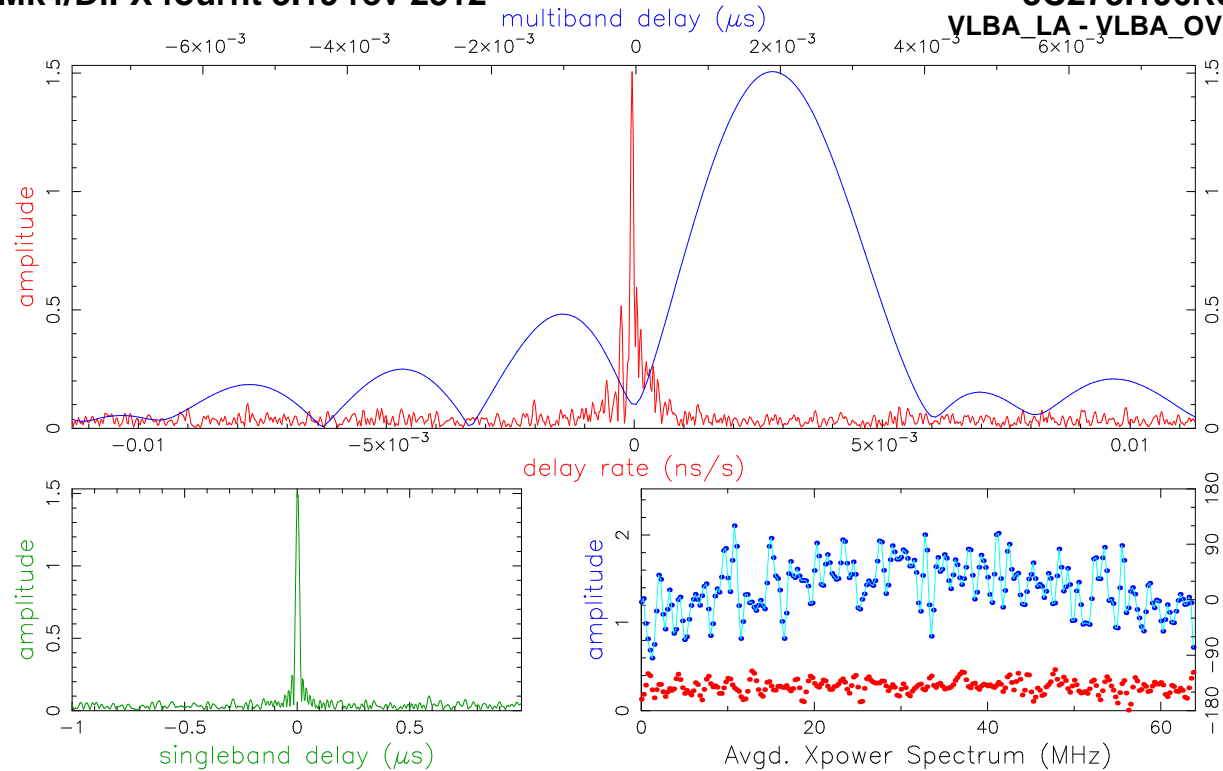
Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 010000.00
 Stop 010300.22
 FRT 010130.00
 Corr/FF/build
 2020:206:023107
 2020:206:153706
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -2.74442171246E+03 | | | | | | | | 1.03587E-03 | +/- 2.0E-04 |
| Sband delay (usec) | -2.74441582158E+03 | | | | | | | | 8.66302E-01 | +/- 1.6E-03 |
| Phase delay (usec) | -2.74528212484E+03 | | | | | | | | -1.51195E-06 | +/- 6.8E-07 |
| Delay rate (us/s) | 2.60986139946E-01 | | | | | | | | -7.99960E-07 | +/- 6.5E-09 |
| Total phase (deg) | | | -84.1 | | | | | | -46.9 | +/- 21.1 |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| PCal mode: MANUAL, MANUAL | | | | | | | | | | |
| PCal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | -1.000 | 1.000 |
| mb window (us) | | | | | | | | | -0.008 | 0.008 |
| dr window (ns/s) | | | | | | | | | -0.011 | 0.011 |
| ion window (TEC) | | | | | | | | | 0.00 | 0.00 |

ph/seg (deg) 70.5 49.6 Search (1024X32) 0.151 +/- 0.028 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 80.8 86.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.6 29.9 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.3 52.2 Inc. frq. avg. 0.152 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 105.4 el 23.4 pa -51.4 n: az 119.8 el 31.6 pa -40.3 u,v (fr/asec) -1488.524 -682.563 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/In..196R8V Output file: /Exps/c201e/v1/1234/No0049/In.W.175.196R8V

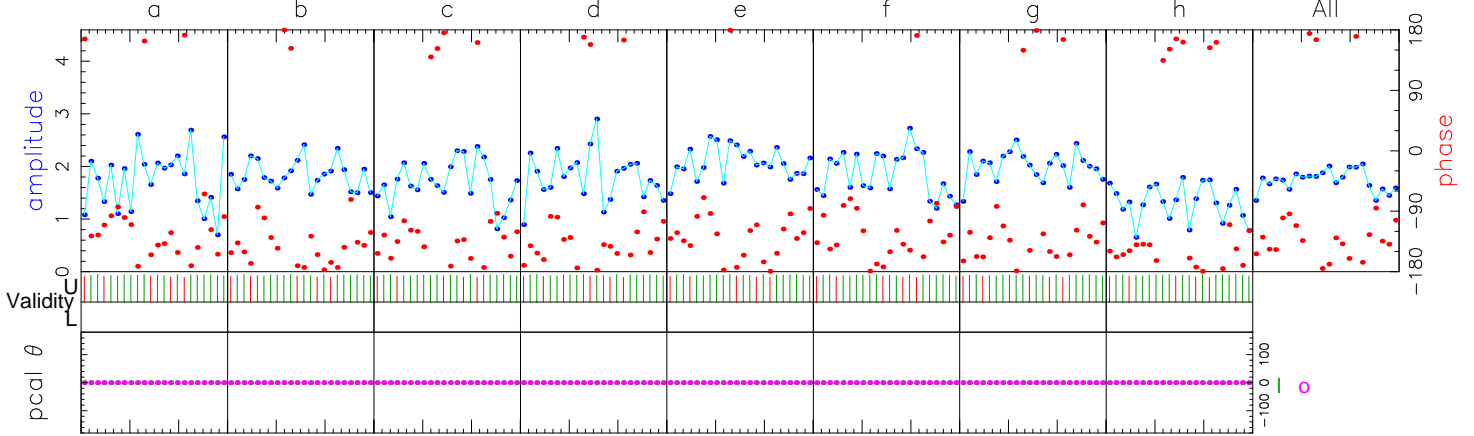


Fringe quality 6

SNR 55.3
Int time 174.205
Amp 1.533
Phase -143.2
PFD 0.0e+00
Delays (us)
SBD 0.001712
MBD 0.001931
Fringe rate (Hz)
-0.003273
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153700
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 |
|-------------------------|--------------------|----------|--------------------------|--------------------|----------------------|--------------|----------|----------|------------|--------|
| | -136.7 | -148.9 | -148.0 | -147.6 | -131.2 | -132.1 | -141.8 | -167.8 | Phase | -143.2 |
| | 1.5 | 1.6 | 1.4 | 1.6 | 1.8 | 1.6 | 1.7 | 1.2 | Ampl. | 1.5 |
| | 257.2 | 257.4 | 257.4 | 257.9 | 257.4 | 257.6 | 257.2 | 257.3 | Sbd box | 257.4 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| l:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| l:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 3.40708962785E+03 | | Apriori delay (usec) | 3.40708769732E+03 | Resid mbdelay (usec) | 1.93053E-03 | +/- | 2.0E-05 | | |
| Sband delay (usec) | 3.40708940932E+03 | | Apriori clock (usec) | -2.3850140E+01 | Resid sbdelay (usec) | 1.71200E-03 | +/- | 1.6E-04 | | |
| Phase delay (usec) | 3.40708769270E+03 | | Apriori clockrate (us/s) | -3.5200000E-07 | Resid phdelay (usec) | -4.61838E-06 | +/- | 6.7E-08 | | |
| Delay rate (us/s) | -7.64810874851E-02 | | Apriori rate (us/s) | -7.64810494851E-02 | Resid rate (us/s) | -3.79999E-08 | +/- | 6.4E-10 | | |
| Total phase (deg) | | -54.2 | Apriori accel (us/s/s) | -1.83193257654E-05 | Resid phase (deg) | -143.2 | +/- | 2.1 | | |

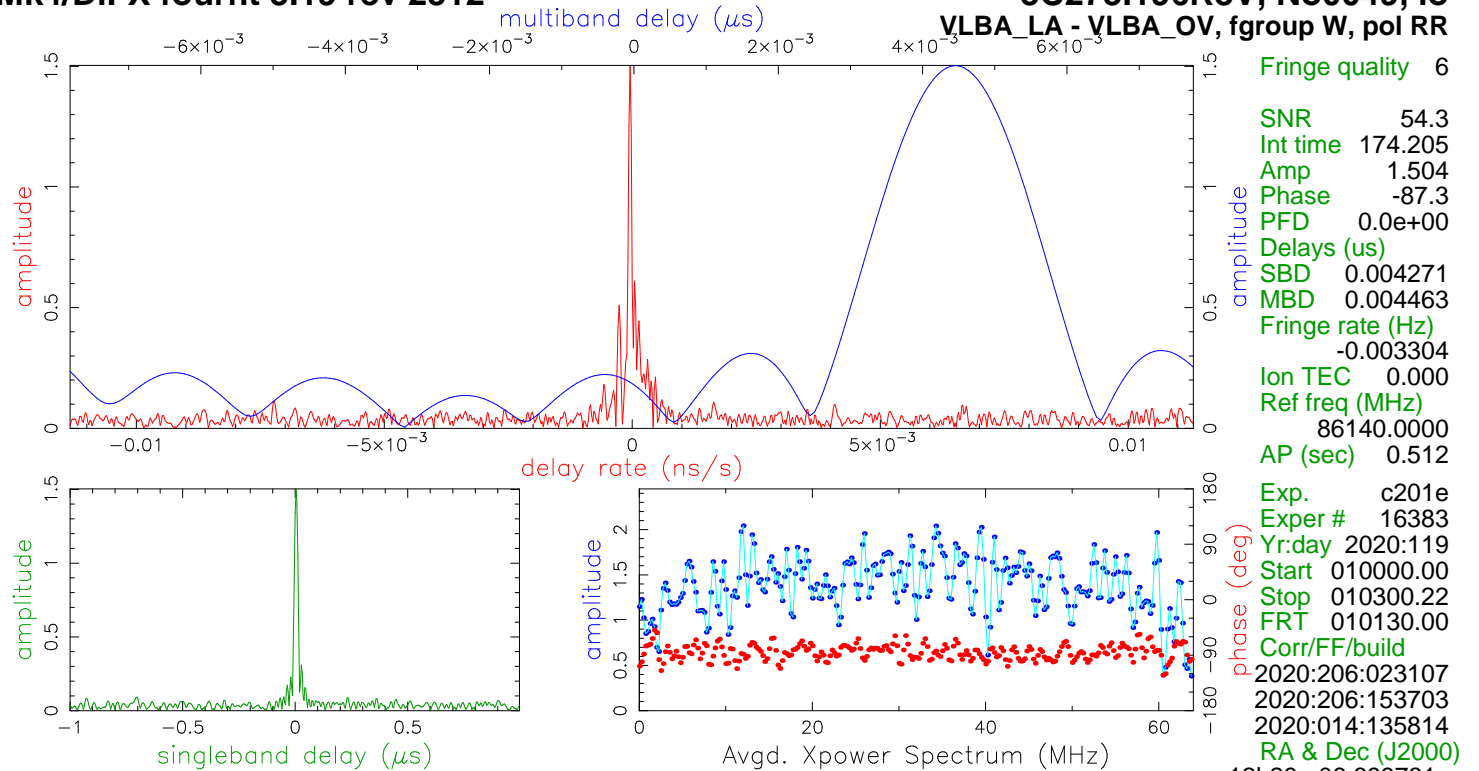
RMS Theor. Amplitude 1.533 +/- 0.028
 ph/seg (deg) 30.4 4.9 Search (1024X32) 1.482
 amp/seg (%) 18.3 8.5 Interp. 0.000
 ph/frq (deg) 12.8 2.9 Inc. seg. avg. 1.730
 amp/frq (%) 11.7 5.1 Inc. frq. avg. 1.529

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Sample rate(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

l: az 105.4 el 23.4 pa -51.4 o: az 98.1 el 13.6 pa -52.1 u,v (fr/asec) 428.809 -229.322 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196R8V, No0049, lo
VLBA_LA - VLBA_OV, fgroup W, pol RR



Fringe quality 6

SNR 54.3

Int time 174.205

Amp 1.504

Phase -87.3

PFD 0.0e+00

Delays (us)

SBD 0.004271

MBD 0.004463

Fringe rate (Hz)

-0.003304

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:206:023107

2020:206:153703

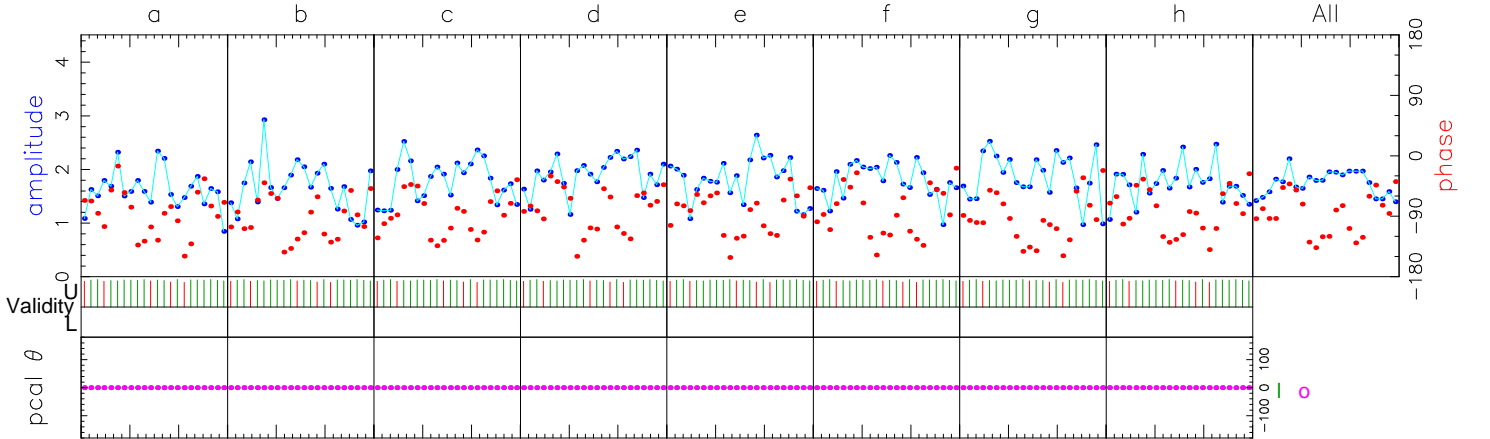
2020:014:135814

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 |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -85.5 | -92.7 | -88.6 | -80.1 | -84.8 | -85.0 | -96.2 | -85.7 | | -87.3 |
| | 1.3 | 1.4 | 1.5 | 1.6 | 1.6 | 1.4 | 1.6 | 1.5 | Ampl. | 1.5 |
| | 257.9 | 257.8 | 258.0 | 258.1 | 258.5 | 258.2 | 258.3 | 258.1 | Sbd box | 258.1 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| l:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| l:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | 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) | 3.40709216035E+03 | | Apriori delay (usec) | | 3.40708769732E+03 | | Resid mbdelay (usec) | | 4.46303E-03 | +/- 2.0E-05 |
| Sband delay (usec) | 3.40709196807E+03 | | Apriori clock (usec) | | -2.3850140E+01 | | Resid sbdelay (usec) | | 4.27075E-03 | +/- 1.6E-04 |
| Phase delay (usec) | 3.40708769451E+03 | | Apriori clockrate (us/s) | | -3.5200000E-07 | | Resid phdelay (usec) | | -2.81553E-06 | +/- 6.8E-08 |
| Delay rate (us/s) | -7.64810878365E-02 | | Apriori rate (us/s) | | -7.64810494851E-02 | | Resid rate (us/s) | | -3.83514E-08 | +/- 6.5E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -1.83193257654E-05 | | Resid phase (deg) | | -87.3 | +/- 2.1 |

RMS Theor. Amplitude 1.504 +/- 0.028

ph/seg (deg) 30.5 5.0 Search (1024X32) 1.480

amp/seg (%) 21.5 8.6 Interp. 0.000

ph/frq (deg) 5.5 3.0 Inc. seg. avg. 1.739

amp/frq (%) 6.0 5.2 Inc. frq. avg. 1.506

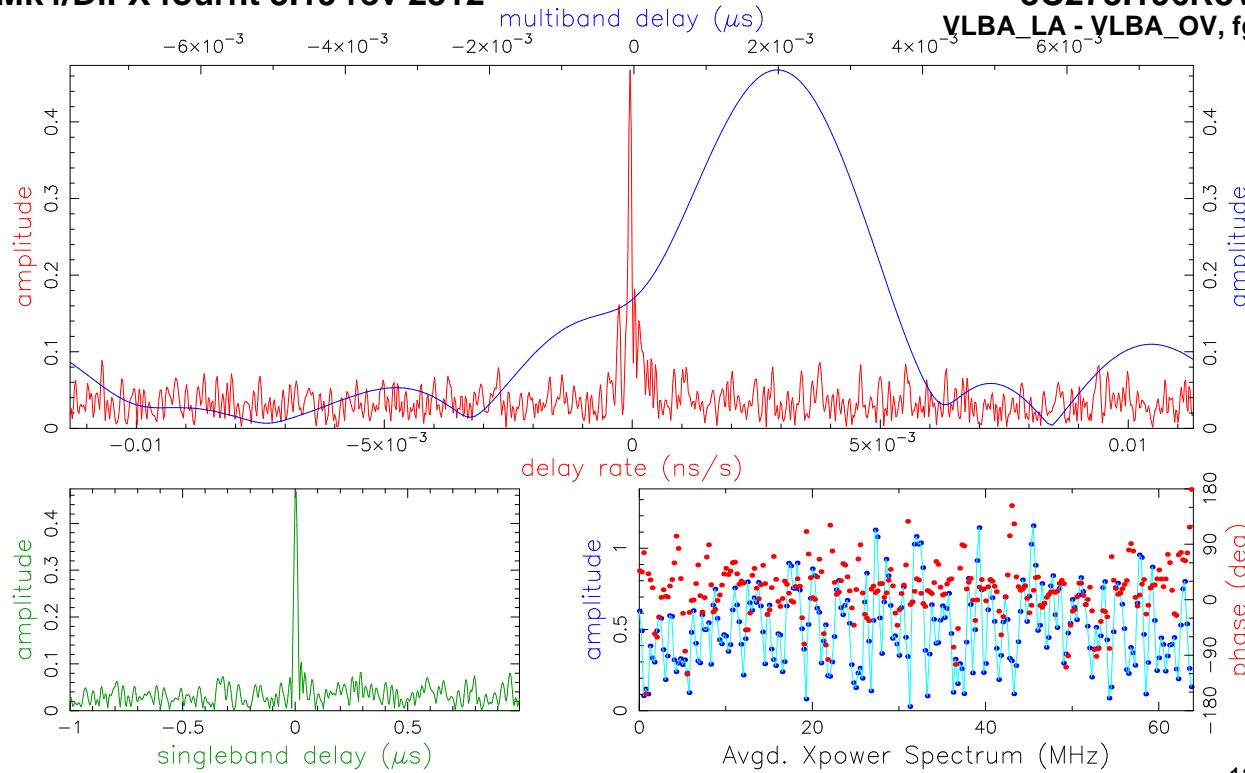
l: az 105.4 el 23.4 pa -51.4 o: az 98.1 el 13.6 pa -52.1 u,v (fr/asec) 428.809 -229.322

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/lo..196R8V Output file: /Exps/c201e/v1/1234/No0049/lo.W.154.196R8V

simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196R8V, No0049, lo
VLBA_LA - VLBA_OV, fgroup W, pol LR

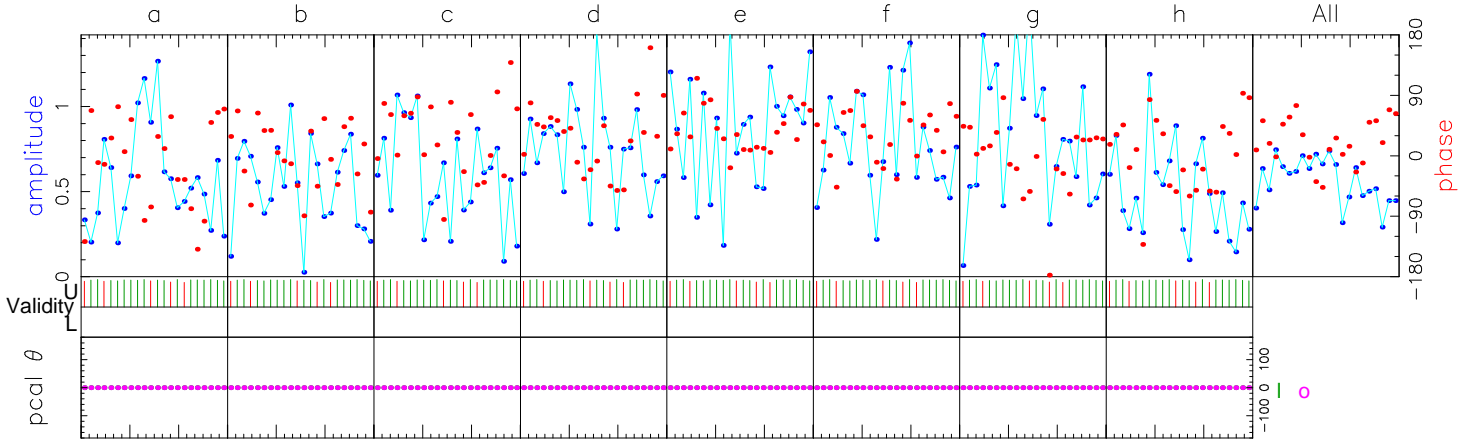


Fringe quality 9

SNR 17.1
Int time 174.205
Amp 0.474
Phase 20.7
PFD 0.0e+00
Delays (us)
SBD 0.002422
MBD 0.001950
Fringe rate (Hz)
-0.003460
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153709
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

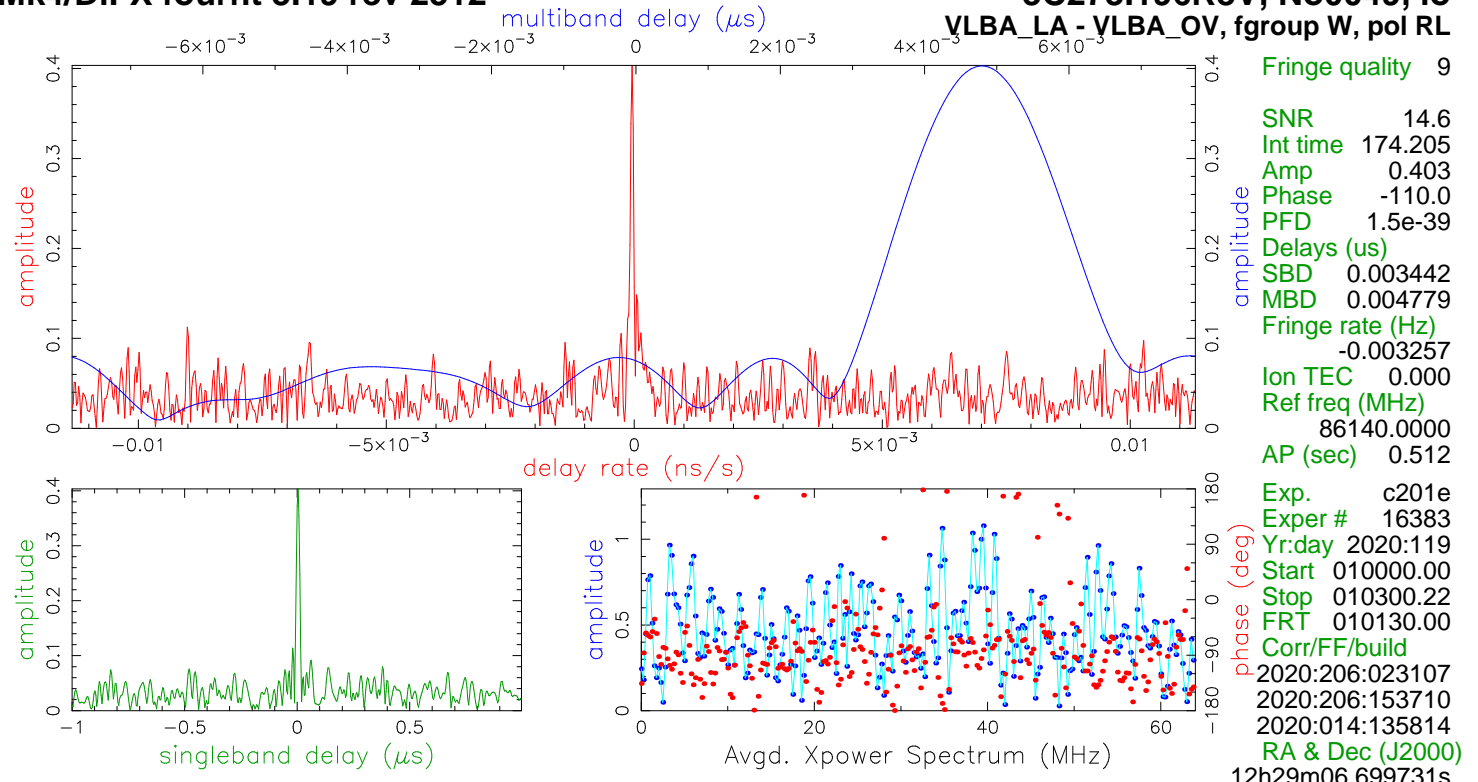
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| l:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| l:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| o | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 3.40708964775E+03 | | | | | 3.40708769732E+03 | | | Resid mbdelay (usec) | 1.95043E-03 +/- 6.3E-05 |
| Sband delay (usec) | 3.40709011982E+03 | | | | | -2.3850140E+01 | | | Resid sbdelay (usec) | 2.42250E-03 +/- 5.0E-04 |
| Phase delay (usec) | 3.40708769799E+03 | | | | | -3.5200000E-07 | | | Resid phdelay (usec) | 6.67619E-07 +/- 2.2E-07 |
| Delay rate (us/s) | -7.64810896561E-02 | | | | | -7.64810494851E-02 | | | Resid rate (us/s) | -4.01710E-08 +/- 2.1E-09 |
| Total phase (deg) | | | 109.7 | | | -1.83193257654E-05 | | | Resid phase (deg) | 20.7 +/- 6.7 |
| | RMS | Theor. | Amplitude | 0.474 +/- 0.028 | | | | | PCal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| ph/seg (deg) | 33.5 | 15.7 | Search (1024X32) | 0.464 | | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 33.3 | 27.4 | Interp. | 0.000 | | | | | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 21.4 | 9.5 | Inc. seg. avg. | 0.544 | | | | | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 34.2 | 16.5 | Inc. frq. avg. | 0.484 | | | | | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |

l: az 105.4 el 23.4 pa -51.4 o: az 98.1 el 13.6 pa -52.1 u,v (fr/asec) 428.809 -229.322 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/lo..196R8V Output file: /Exps/c201e/v1/1234/No0049/lo.W.191.196R8V



Fringe quality 9

SNR 14.6

Int time 174.205

Amp 0.403

Phase -110.0

PFD 1.5e-39

Delays (us)

SBD 0.003442

MBD 0.004779

Fringe rate (Hz)

-0.003257

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 010000.00

Stop 010300.22

FRT 010130.00

Corr/FF/build

2020:206:023107

2020:206:153710

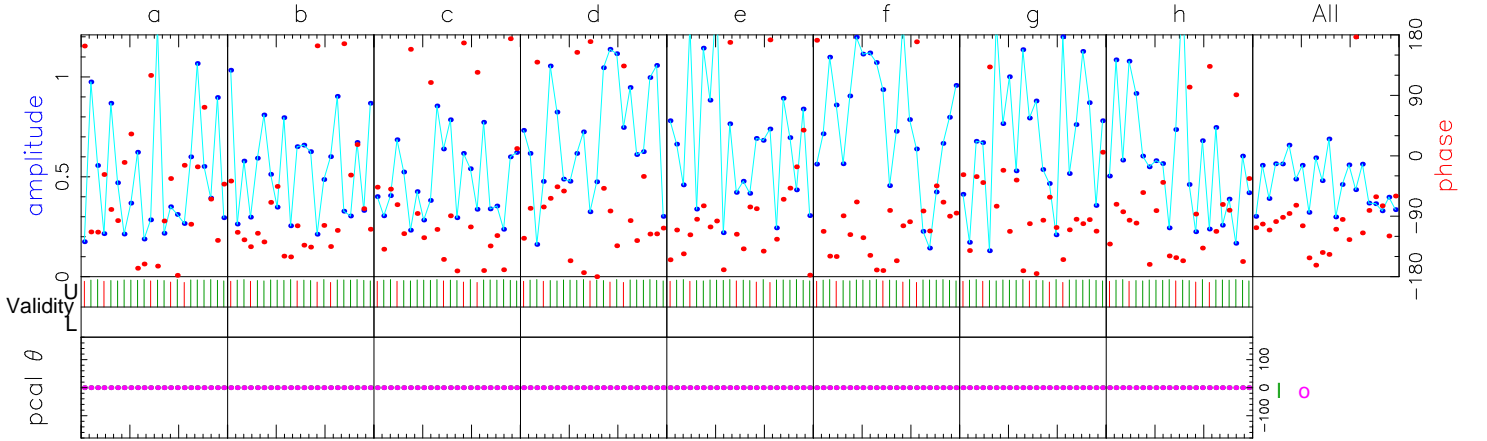
2020:014:135814

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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | 3.40709247632E+03 | | | | | 3.40708769732E+03 | | | 4.77899E-03 | +/- 7.5E-05 |
| Sband delay (usec) | 3.40709113932E+03 | | | | | -2.3850140E+01 | | | 3.44200E-03 | +/- 5.9E-04 |
| Phase delay (usec) | 3.40708769378E+03 | | | | | -3.5200000E-07 | | | -3.54584E-06 | +/- 2.5E-07 |
| Delay rate (us/s) | -7.64810872909E-02 | | | | | -7.64810494851E-02 | | | -3.78058E-08 | +/- 2.4E-09 |
| Total phase (deg) | | | -20.9 | | | -1.83193257654E-05 | | | -110.0 | +/- 7.9 |
| 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) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | -1.000 | 1.000 |
| mb window (us) | | | | | | | | | -0.008 | 0.008 |
| dr window (ns/s) | | | | | | | | | -0.011 | 0.011 |
| ion window (TEC) | | | | | | | | | 0.00 | 0.00 |

ph/seg (deg) 31.8 18.5

amp/seg (%) 33.1 32.2

ph/frq (deg) 11.3 11.1

amp/frq (%) 27.2 19.4

l: az 105.4 el 23.4 pa -51.4

o: az 98.1 el 13.6 pa -52.1

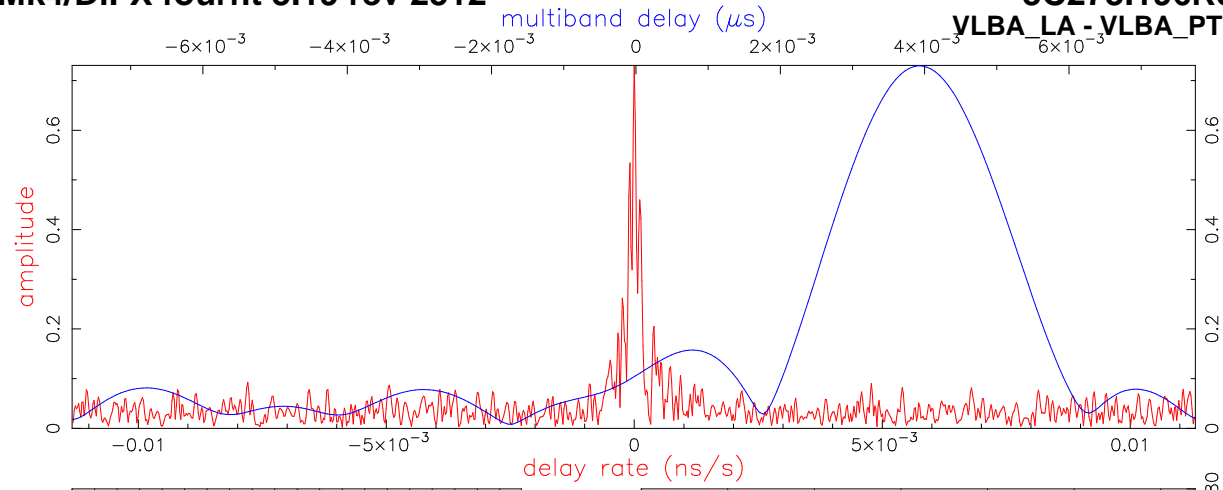
u,v (fr/asec) 428.809 -229.322

Control file: cf_1234_gmva

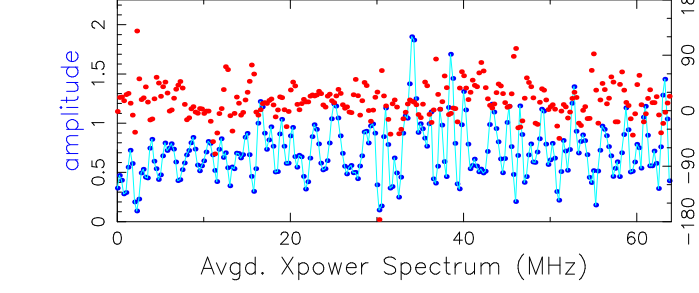
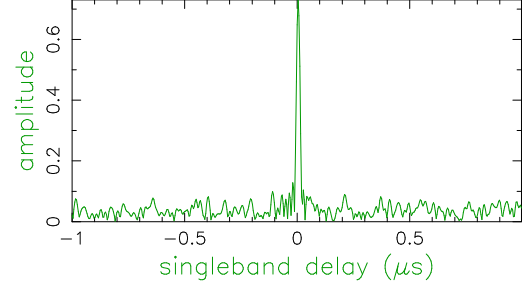
Input file: /Exps/c201e/v1/1234/No0049/lo..196R8V

Output file: /Exps/c201e/v1/1234/No0049/lo.W.203.196R8V

simultaneous interpolator

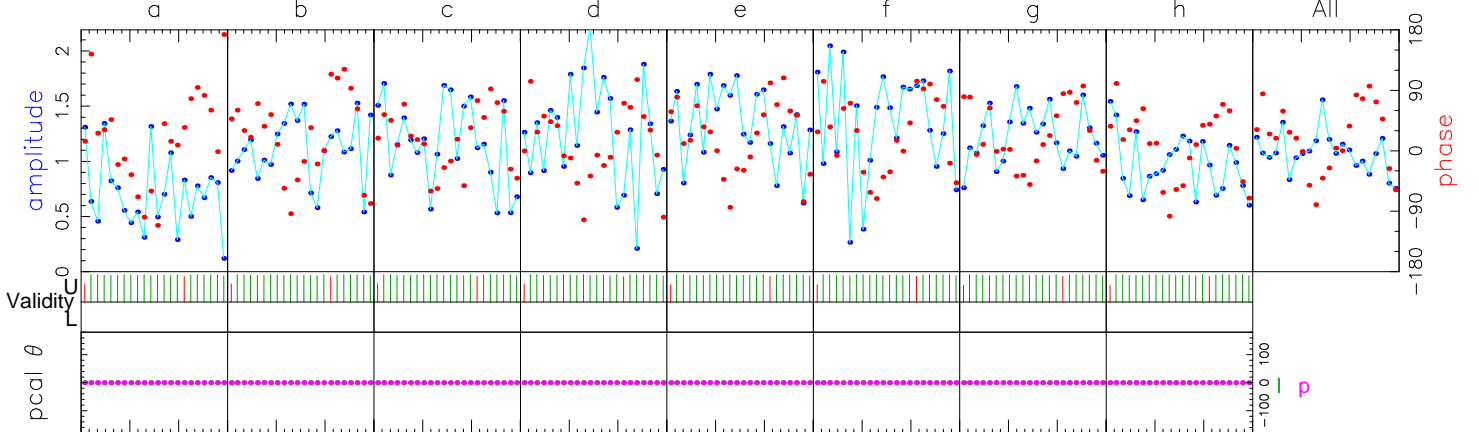


Fringe quality 7
SNR 26.3
Int time 173.782
Amp 0.731
Phase 18.8
PFD 0.0e+00
Delays (us)
SBD 0.004340
MBD 0.003937
Fringe rate (Hz) -0.000254
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:206:023107
2020:206:153702
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

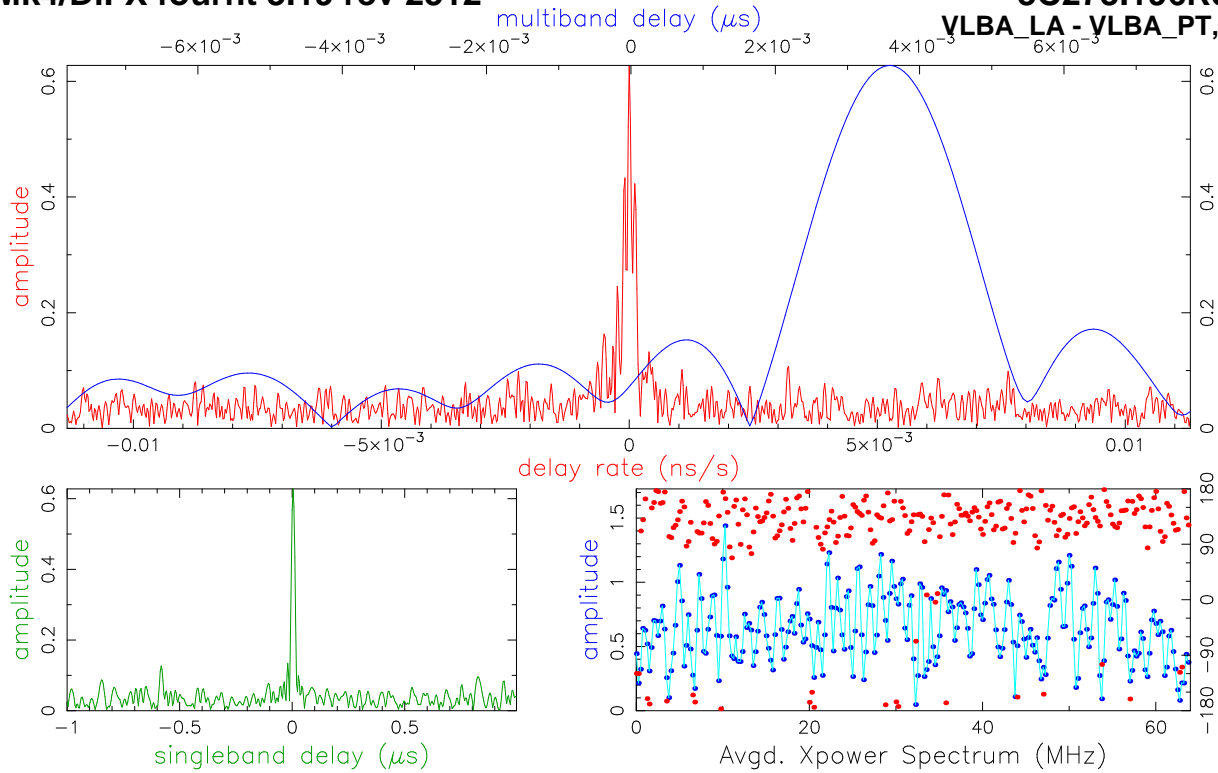


amplitude
phase (deg)
Amplitude
phase (deg)

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



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|---------------------------|-------------|---|----------|---|----------|------------------------------|----------|---------------------------|--------------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| lp | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| p | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | 3.58228102542E+02 | | Apriori delay (usec) | | 3.58224165605E+02 | | Resid mbdelay (usec) | | 3.93694E-03 | +/- 4.1E-05 |
| Sband delay (usec) | 3.58228505855E+02 | | Apriori clock (usec) | | -2.1041992E+01 | | Resid sbdelay (usec) | | 4.34025E-03 | +/- 3.3E-04 |
| Phase delay (usec) | 3.58224166210E+02 | | Apriori clockrate (us/s) | | -3.5499999E-07 | | Resid phdelay (usec) | | 6.05784E-07 | +/- 1.4E-07 |
| Delay rate (us/s) | -3.93397465101E-02 | | Apriori rate (us/s) | | -3.93397435653E-02 | | Resid rate (us/s) | | -2.94477E-09 | +/- 1.3E-09 |
| Total phase (deg) | 243.9 | | Apriori accel (us/s/s) | | -1.93635156708E-06 | | Resid phase (deg) | | 18.8 | +/- 4.4 |
| ph/seg (deg) | RMS 49.4 | Theor. 10.2 | Amplitude 0.731 +/- 0.028 | | Pcal mode: MANUAL, MANUAL | | PC period (AP's) 5, 5 | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 53.2 | 17.8 | Search (1024X32) 0.728 | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | SampCntNorm: enabled | | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 6.9 | 6.2 | Interp. 0.000 | | Bits/sample: 2x2 | | Sample rate(MISamp/s): 128 | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 23.2 | 10.7 | Inc. seg. avg. 1.061 | | Data rate(Mb/s): 2048 | | nlags: 256 t_cohere infinite | | ion window (TEC) | 0.00 0.00 |
| l | az 105.4 el 23.4 pa -51.4 | | p: az 103.6 el 22.2 pa -53.4 | | u,v (fr/asec) 224.485 180.900 | | | | simultaneous interpolator | |
| Control file: | cf_1234_gmva | | Input file: /Exps/c201e/v1/1234/No0049/lp..196R8V | | Output file: /Exps/c201e/v1/1234/No0049/lp.W.147.196R8V | | | | | |

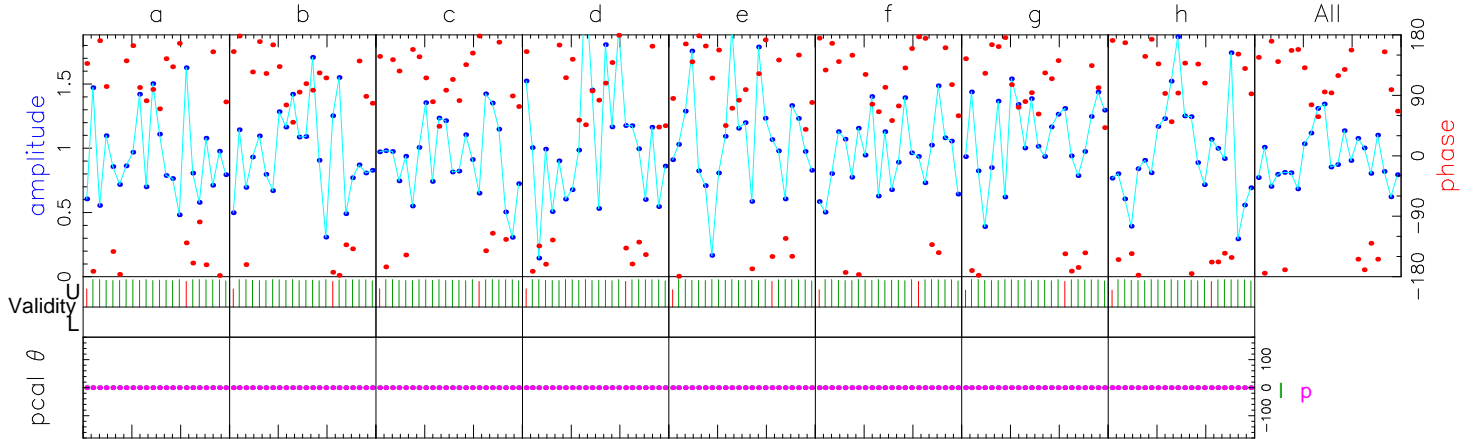


Fringe quality 9

SNR 22.6
Int time 173.782
Amp 0.628
Phase 142.3
PFD 0.0e+00
Delays (us)
SBD 0.004058
MBD 0.003587
Fringe rate (Hz) -0.000031
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

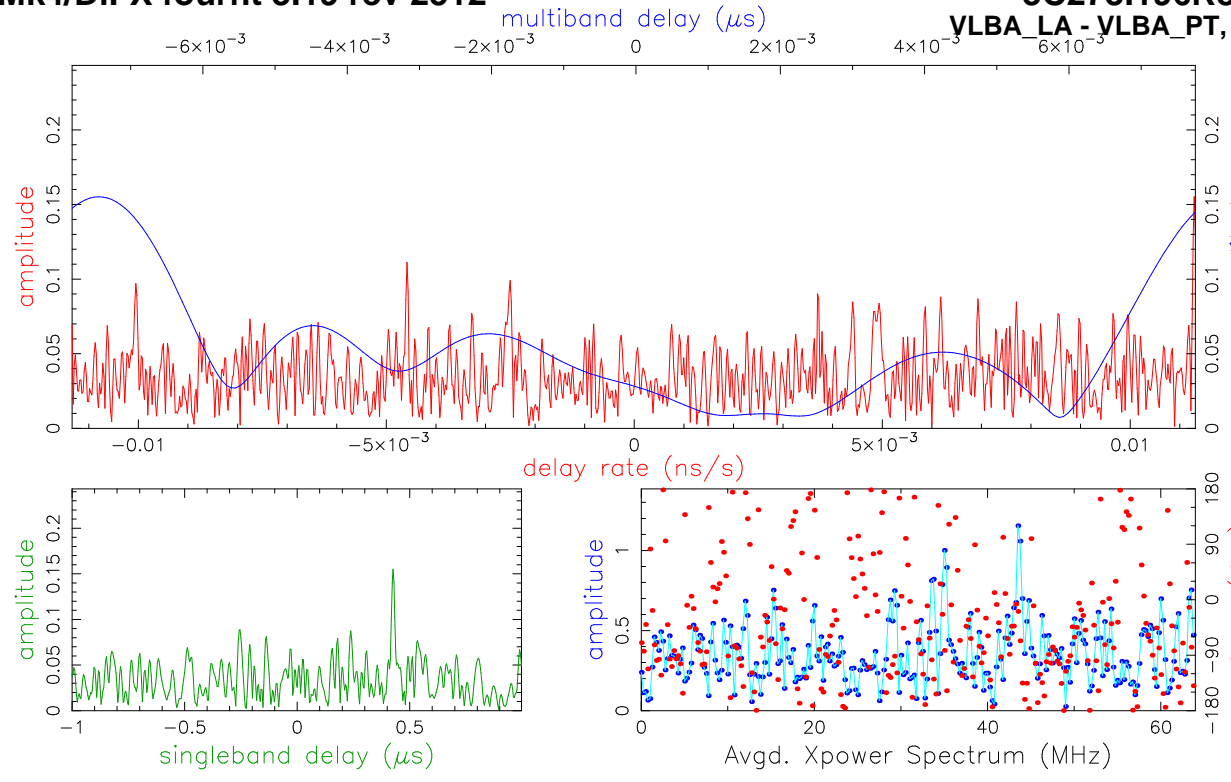
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:206:023107
2020:206:153703
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| lp | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| lp | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| p | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| Group delay (usec)(sbd) | 3.58227752667E+02 | | Apriori delay (usec) | | 3.58224165605E+02 | | Resid mbdelay (usec) | | 3.58706E-03 | +/- 4.8E-05 |
| Sband delay (usec) | 3.58228223605E+02 | | Apriori clock (usec) | | -2.1041992E+01 | | Resid sbdelay (usec) | | 4.05800E-03 | +/- 3.8E-04 |
| Phase delay (usec) | 3.58224170193E+02 | | Apriori clockrate (us/s) | | -3.5499999E-07 | | Resid phdelay (usec) | | 4.58884E-06 | +/- 1.6E-07 |
| Delay rate (us/s) | -3.93397439224E-02 | | Apriori rate (us/s) | | -3.93397435653E-02 | | Resid rate (us/s) | | -3.57113E-10 | +/- 1.6E-09 |
| Total phase (deg) | 7.4 | | Apriori accel (us/s/s) | | -1.93635156708E-06 | | Resid phase (deg) | | 142.3 | +/- 5.1 |

ph/seg (deg) 47.4 11.9 Search (1024X32) 0.620 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.8 20.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.6 7.2 Inc. seg. avg. 0.909 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.7 12.5 Inc. frq. avg. 0.628 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 105.4 el 23.4 pa -51.4 p: az 103.6 el 22.2 pa -53.4 u,v (fr/asec) 224.485 180.900 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/lp..196R8V Output file: /Exps/c201e/v1/1234/No0049/lp.W.157.196R8V

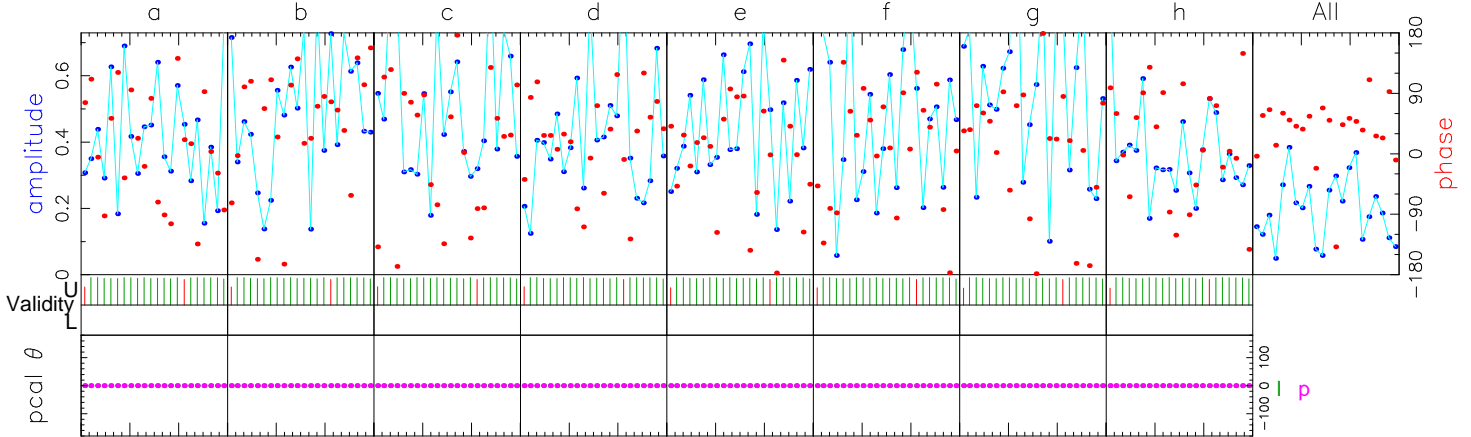


Fringe quality 0

SNR 5.6
Int time 173.782
Amp 0.243
Phase 47.8
PFD 9.3e-01
Delays (us)
SBD 0.425859
MBD 0.008188
Fringe rate (Hz) 0.974516
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153705
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

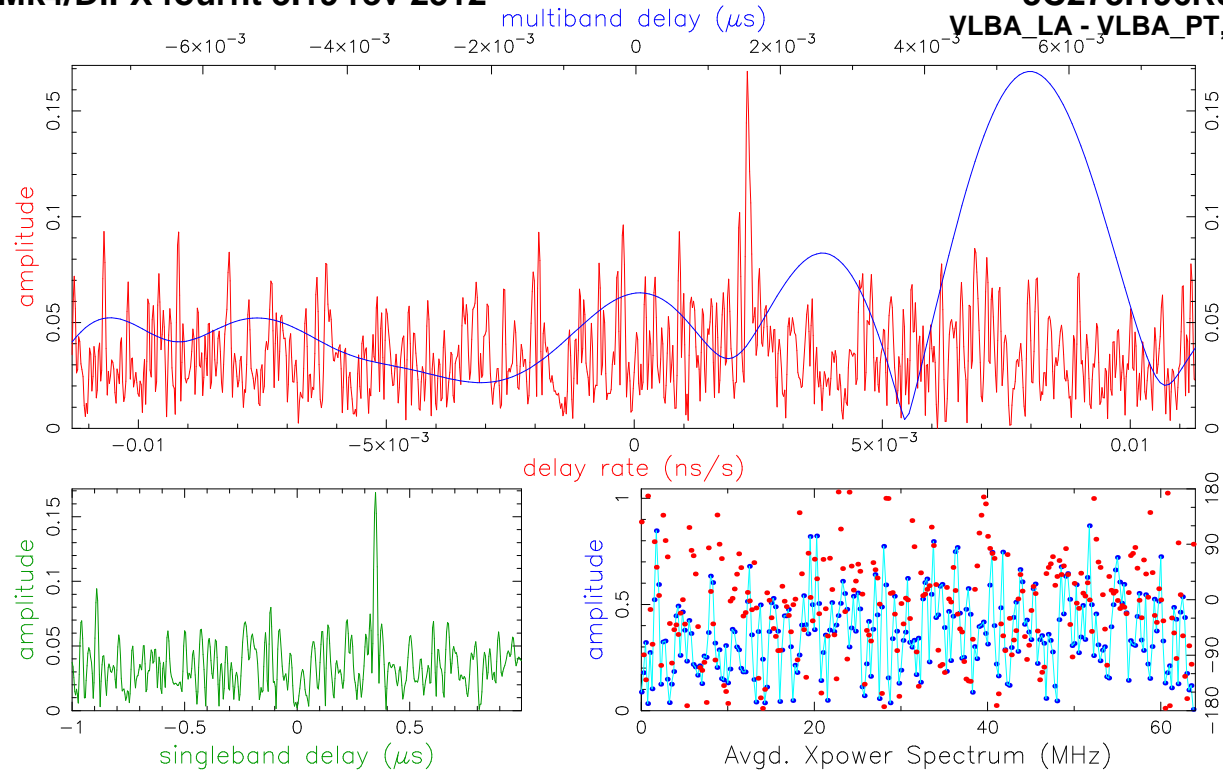
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



| | 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 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| lp | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| lp | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| p | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | | 3.58654228448E+02 | | | | 3.58224165605E+02 | | | 8.18784E-03 | +/- 1.9E-04 |
| Sband delay (usec) | | 3.58650024355E+02 | | | | -2.1041992E+01 | | | 4.25859E-01 | +/- 1.5E-03 |
| Phase delay (usec) | | 3.58224167146E+02 | | | | -3.5499999E-07 | | | 1.54166E-06 | +/- 6.6E-07 |
| Delay rate (us/s) | | -3.93284304056E-02 | | | | -3.93397435653E-02 | | | 1.13132E-05 | +/- 6.3E-09 |
| Total phase (deg) | | | 272.9 | | | -1.93635156708E-06 | | | 47.8 | +/- 20.5 |
| | | | | | | | | | | |
| ph/seg (deg) | 47.8 | 48.0 | | 0.243 +/- 0.043 | | | | | | |
| amp/seg (%) | 67.2 | 83.9 | | 0.000 | | | | | | |
| ph/frq (deg) | 38.0 | 29.0 | | 0.229 | | | | | | |
| amp/frq (%) | 33.8 | 50.6 | | 0.247 | | | | | | |

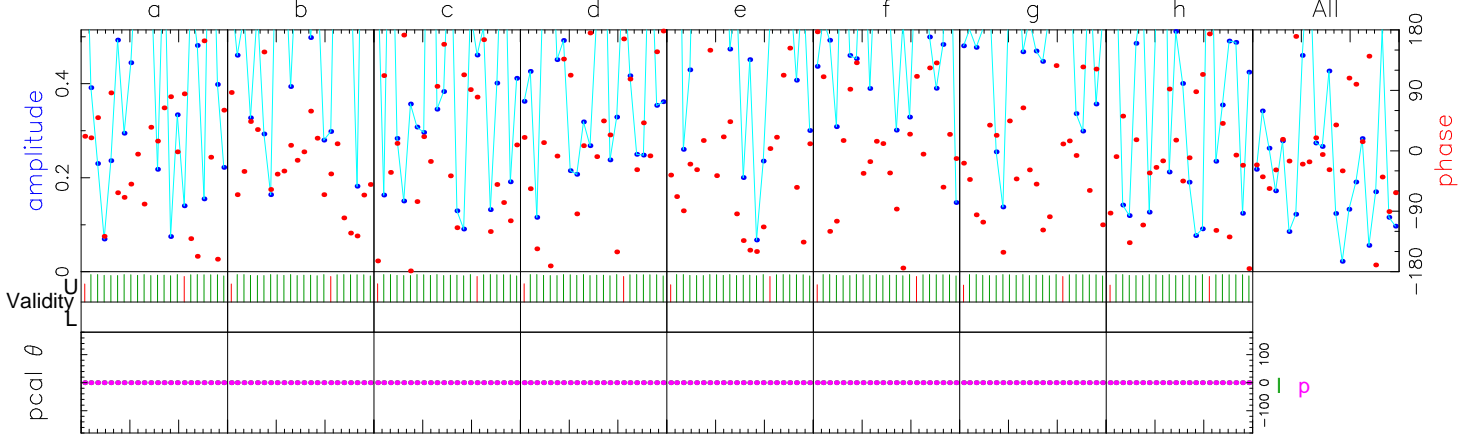
l: az 105.4 el 23.4 pa -51.4 p: az 103.6 el 22.2 pa -53.4 u,v (fr/asec) 224.485 180.900 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/lp..196R8V Output file: /Exps/c201e/v1/1234/No0049/lp.W.169.196R8V



Fringe quality 0
SNR 6.1
Int time 173.782
Amp 0.172
Phase -17.0
PFD 1.4e-01
Delays (us)
SBD 0.347592
MBD 0.005458
Fringe rate (Hz) 0.196809
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build 2020:206:023107
2020:206:153707
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

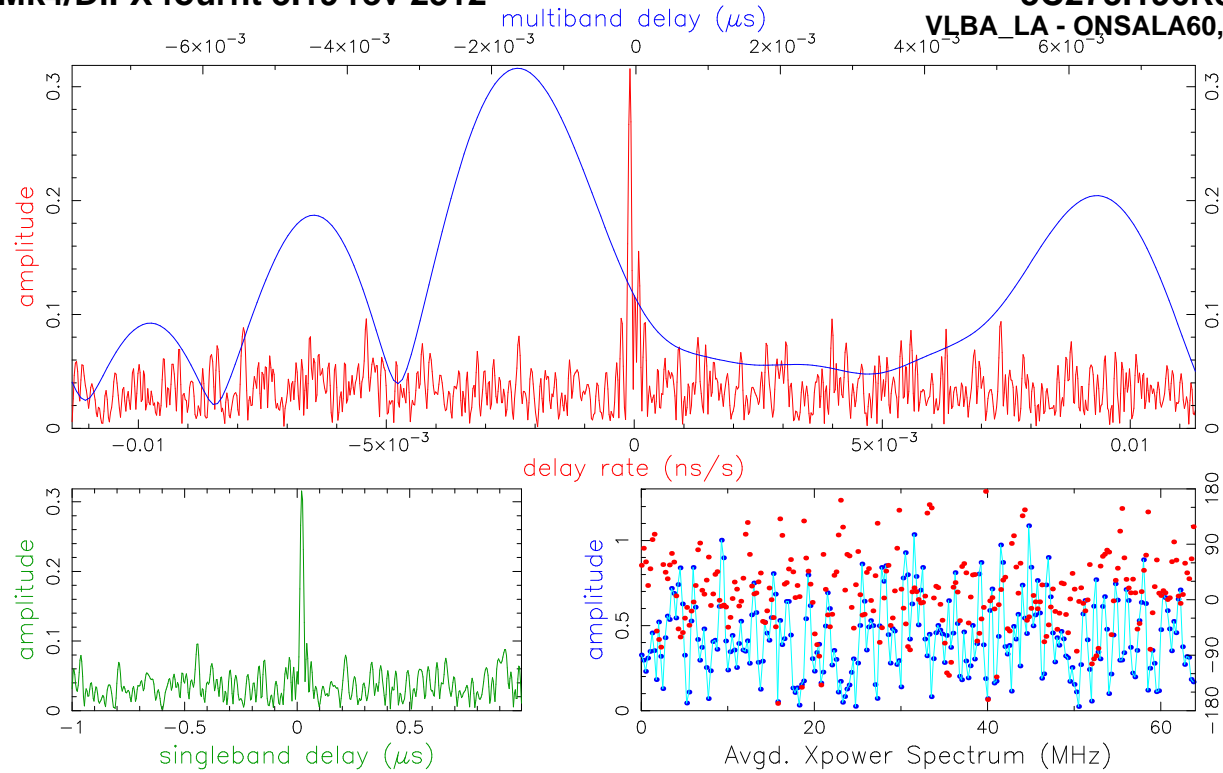


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| | -11.0 | -24.7 | -29.4 | 47.3 | -31.4 | 20.3 | -22.5 | -32.6 | Phase | -17.0 |
| | 0.2 | 0.4 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | Ampl. | 0.2 |
| | 398.1 | 346.2 | 339.3 | 147.3 | 344.7 | 232.2 | 156.5 | 97.1 | Sbd box | 346.0 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| l:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| l:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| p | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |

Group delay (usec)(sbd) 3.58573373437E+02 Apriori delay (usec) 3.58224165605E+02 Resid mbdelay (usec) 5.45783E-03 +/- 1.8E-04
Sband delay (usec) 3.58571757855E+02 Apriori clock (usec) -2.1041992E+01 Resid sbdelay (usec) 3.47592E-01 +/- 1.4E-03
Phase delay (usec) 3.58224165058E+02 Apriori clockrate (us/s) -3.5499999E-07 Resid phdelay (usec) -5.47101E-07 +/- 6.1E-07
Delay rate (us/s) -3.93374588127E-02 Apriori rate (us/s) -3.93397435653E-02 Resid rate (us/s) 2.28475E-06 +/- 5.8E-09
Total phase (deg) 208.1 Apriori accel (us/s/s) -1.93635156708E-06 Resid phase (deg) -17.0 +/- 18.8

RMS Theor. Amplitude 0.172 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 76.1 44.2 Search (1024X32) 0.166 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 106.9 77.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg) 32.3 26.6 Inc. seg. avg. 0.190 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
amp/frq (%) 45.7 46.5 Inc. frq. avg. 0.166 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 105.4 el 23.4 pa -51.4 p: az 103.6 el 22.2 pa -53.4 u,v (fr/asec) 224.485 180.900 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/lp..196R8V Output file: /Exps/c201e/v1/1234/No0049/lp.W.180.196R8V

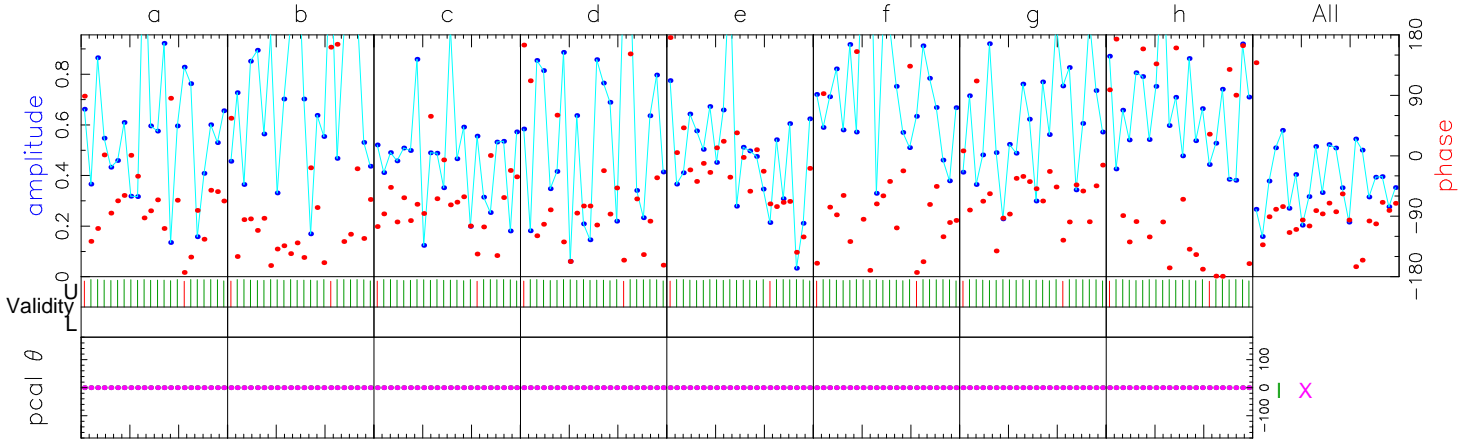


Fringe quality 9

SNR 11.6
Int time 176.651
Amp 0.319
Phase -95.8
PFD 1.2e-22
Delays (us)
SBD 0.020710
MBD -0.001586
Fringe rate (Hz)
-0.007795
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

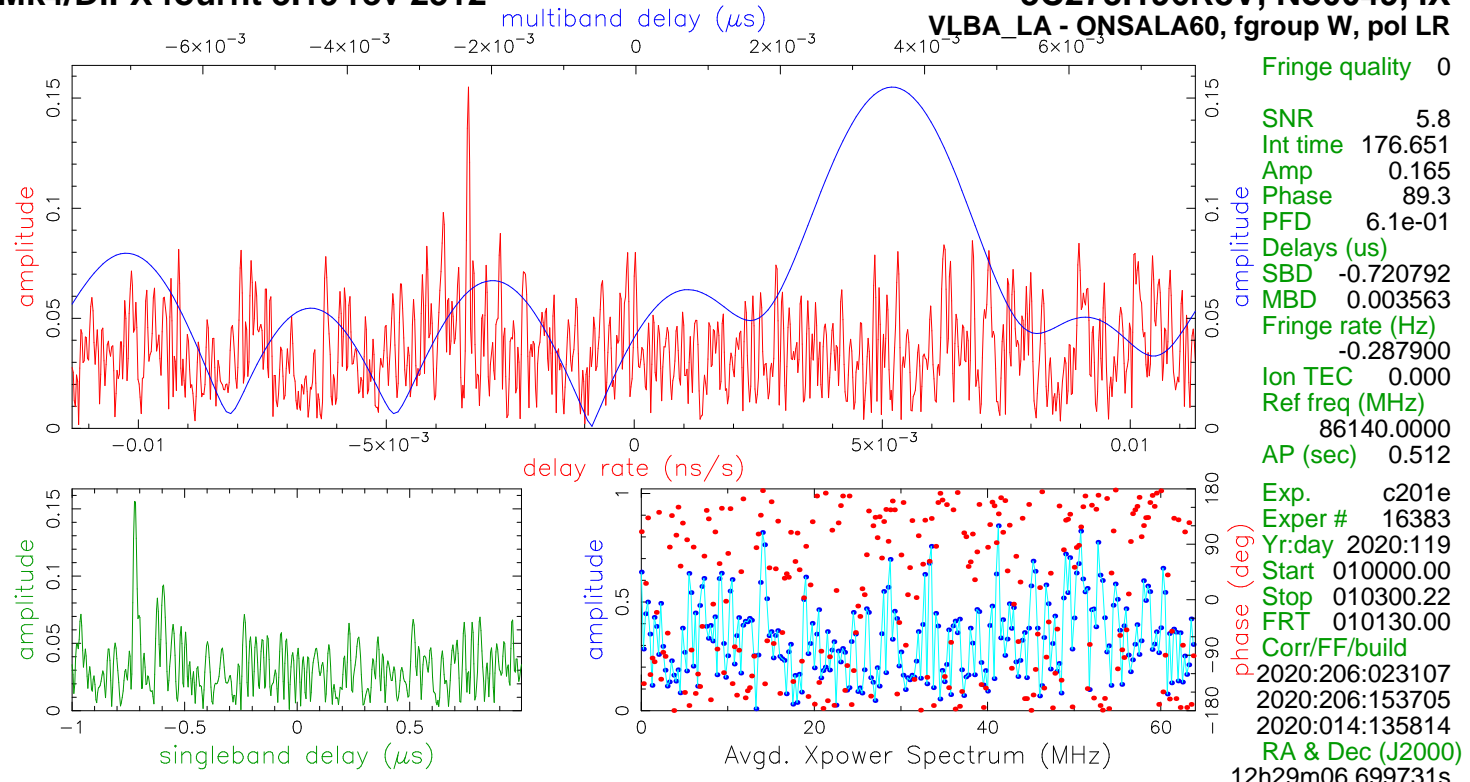
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2020:206:023107
2020:206:153703
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

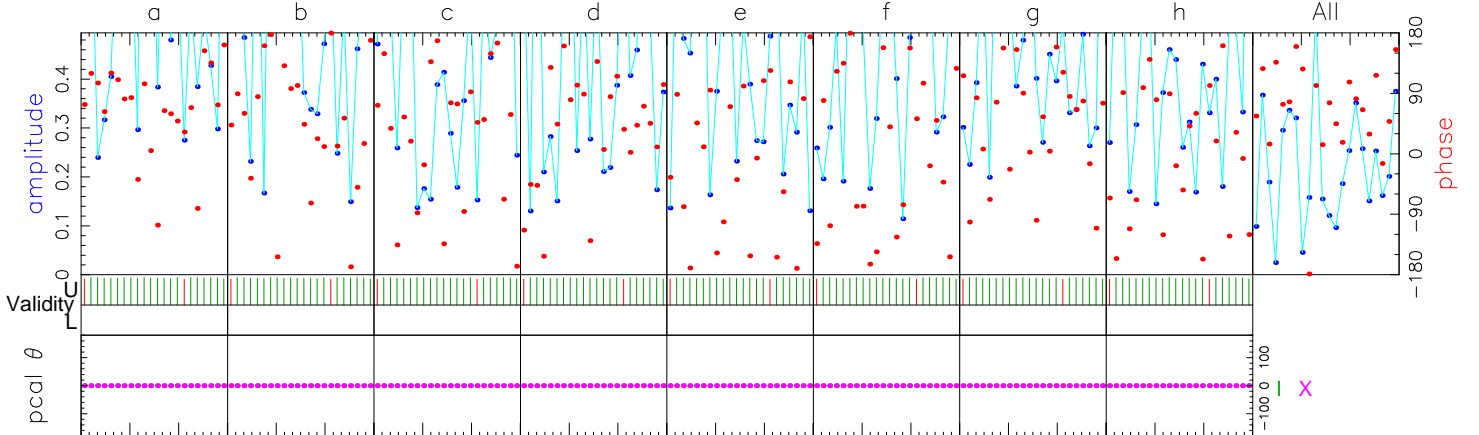


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -85.2 | -127.7 | -73.0 | -112.5 | -24.8 | -106.5 | -62.0 | -164.2 | Phase | -95.8 |
| | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | Ampl. | 0.4 |
| | 261.7 | 262.7 | 262.5 | 262.5 | 261.9 | 261.3 | 261.4 | 260.5 | Sbd box | 262.3 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| I:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| I:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| I | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| X | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.51165948704E+03 | | Apriori delay (usec) | | 1.51164544806E+03 | | Resid mbdelay (usec) | | -1.58601E-03 | +/- 9.4E-05 |
| Sband delay (usec) | 1.51166615781E+03 | | Apriori clock (usec) | | -4.4573170E+01 | | Resid sbdelay (usec) | | 2.07097E-02 | +/- 7.4E-04 |
| Phase delay (usec) | 1.51164544497E+03 | | Apriori clockrate (us/s) | | -6.7900004E-07 | | Resid phdelay (usec) | | -3.08918E-06 | +/- 3.2E-07 |
| Delay rate (us/s) | 1.80790701341E+00 | | Apriori rate (us/s) | | 1.80790710390E+00 | | Resid rate (us/s) | | -9.04913E-08 | +/- 3.1E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -9.26037189085E-06 | | Resid phase (deg) | | -95.8 | +/- 9.9 |

ph/seg (deg) 37.1 23.2 Amplitude 0.319 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.4 40.5 Search (1024X32) 0.312 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.4 14.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.3 24.4 Inc. seg. avg. 0.349 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 105.4 el 23.4 pa -51.4 X: az 241.2 el 19.3 pa 28.3 u,v (fr/asec) -10365.400 -2304.144 simultaneous interpolator



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

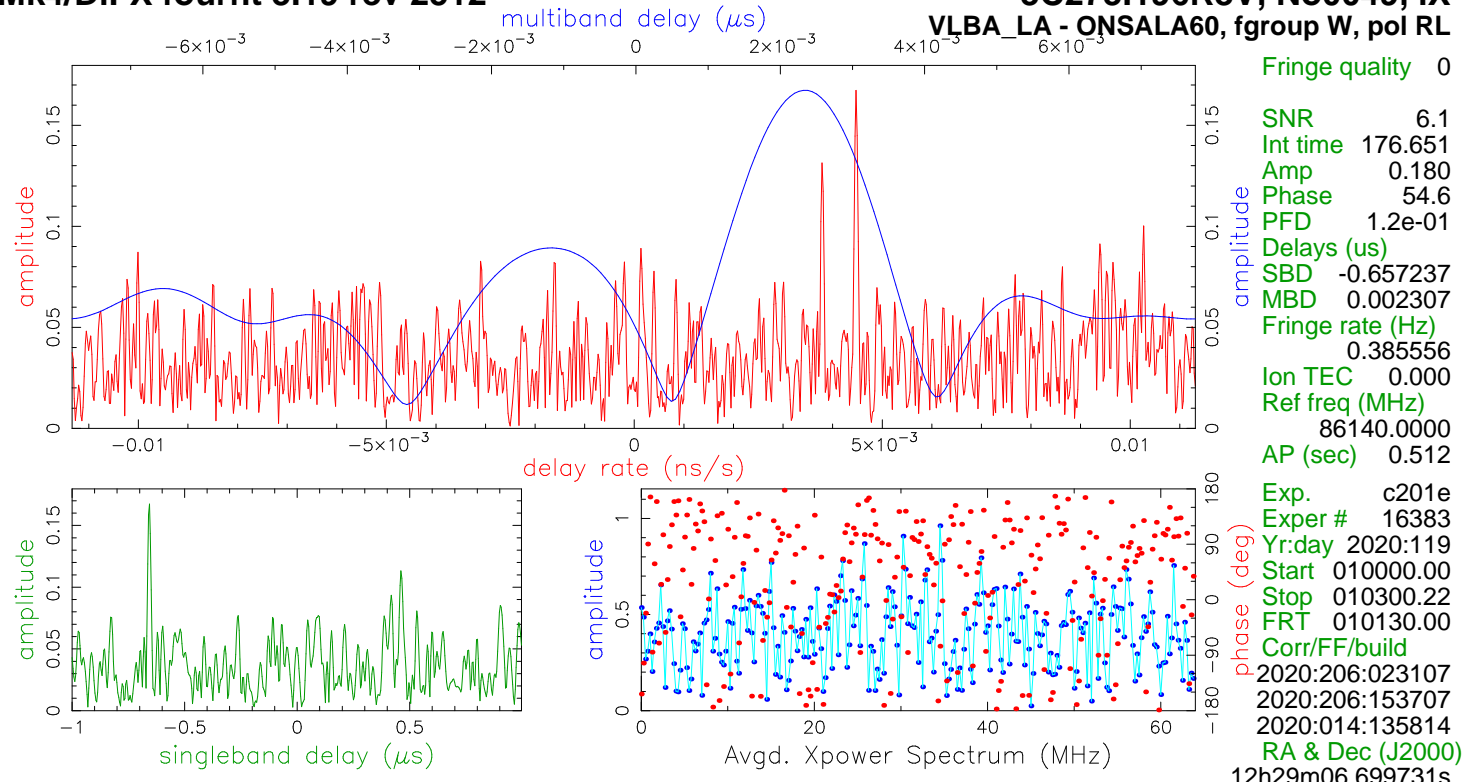


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|----------|-------------------|----------|--------------------------|--------------------|----------|----------------------|--------------|------------|-------------|
| | 88.3 | 101.2 | 86.2 | 68.8 | 100.8 | 151.9 | 64.5 | 169.0 | Phase | 89.3 |
| | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | Ampl. | 0.2 |
| | 73.1 | 6.6 | 426.5 | 228.4 | 445.1 | 456.1 | 195.2 | 396.2 | Sbd box | 72.5 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| I:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| I:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| X | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | | 1.51093026096E+03 | | Apriori delay (usec) | 1.51164544806E+03 | | Resid mbdelay (usec) | 3.56291E-03 | | +/- 1.9E-04 |
| Sband delay (usec) | | 1.51092465606E+03 | | Apriori clock (usec) | -4.4573170E+01 | | Resid sbdelay (usec) | -7.20792E-01 | | +/- 1.5E-03 |
| Phase delay (usec) | | 1.51164545094E+03 | | Apriori clockrate (us/s) | -6.7900004E-07 | | Resid phdelay (usec) | 2.88106E-06 | | +/- 6.4E-07 |
| Delay rate (us/s) | | 1.80790376166E+00 | | Apriori rate (us/s) | 1.80790710390E+00 | | Resid rate (us/s) | -3.34223E-06 | | +/- 6.1E-09 |
| Total phase (deg) | | | 51.7 | Apriori accel (us/s/s) | -9.26037189085E-06 | | Resid phase (deg) | 89.3 | | +/- 19.8 |

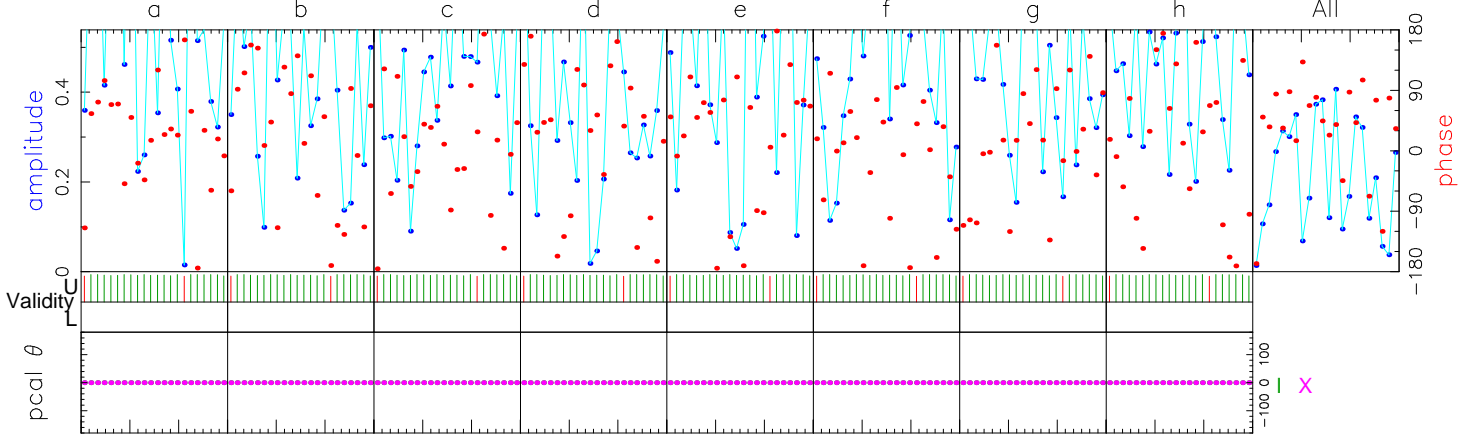
| | RMS | Theor. | Amplitude | 0.165 +/- 0.029 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
|--------------|------|--------|------------------|-----------------|--|-------------------------------|
| ph/seg (deg) | 52.6 | 46.5 | Search (1024X32) | 0.154 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 88.0 | 81.1 | Interp. | 0.000 | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 43.9 | 28.0 | Inc. seg. avg. | 0.176 | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 65.4 | 48.9 | Inc. frq. avg. | 0.156 | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |

I: az 105.4 el 23.4 pa -51.4 X: az 241.2 el 19.3 pa 28.3 u,v (fr/asec) -10365.400 -2304.144 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/IX..196R8V Output file: /Exps/c201e/v1/1234/No0049/IX.W.167.196R8V

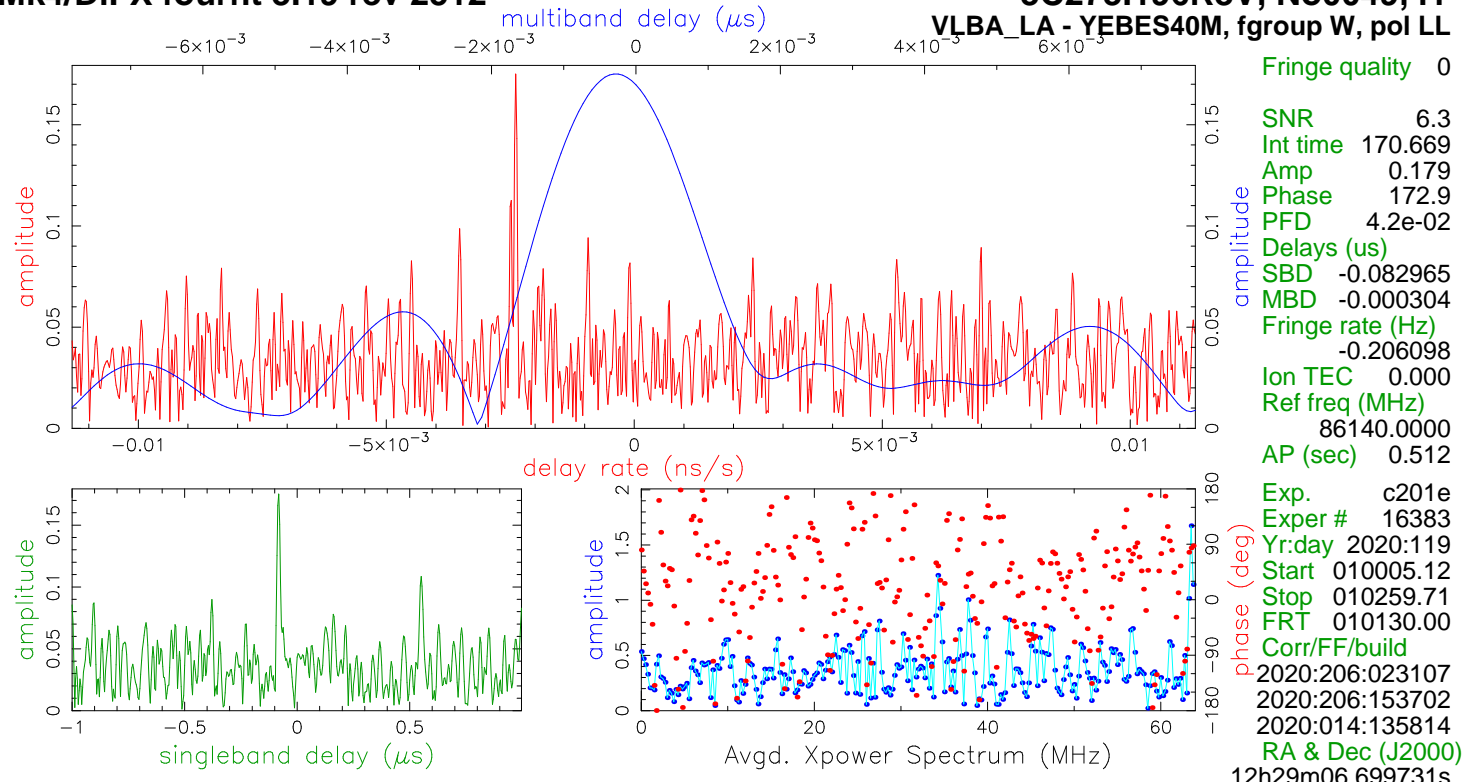


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

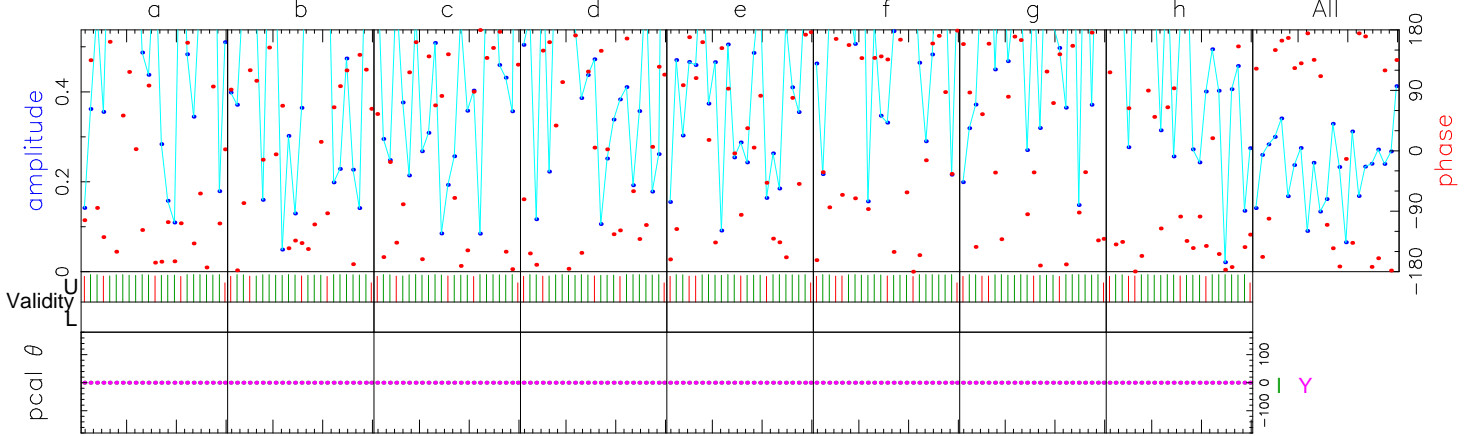


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|----------|-------------------|----------|----------|----------|--------------------|----------|----------|--|-------------------------------|
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| I:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | Chan ids |
| X | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | Tracks |
| Group delay (usec)(sbd) | | 1.51099150499E+03 | | | | 1.51164544806E+03 | | | Resid mbdelay (usec) | 2.30694E-03 +/- 1.8E-04 |
| Sband delay (usec) | | 1.51098821131E+03 | | | | -4.4573170E+01 | | | Resid sbdelay (usec) | -6.57237E-01 +/- 1.4E-03 |
| Phase delay (usec) | | 1.51164544982E+03 | | | | -6.7900004E-07 | | | Resid phdelay (usec) | 1.76138E-06 +/- 6.0E-07 |
| Delay rate (us/s) | | 1.80791157982E+00 | | | | 1.80790710390E+00 | | | Resid rate (us/s) | 4.47593E-06 +/- 5.8E-09 |
| Total phase (deg) | | | 17.0 | | | -9.26037189085E-06 | | | Resid phase (deg) | 54.6 +/- 18.7 |
| RMS | 64.7 | 43.9 | | | | | | | PCal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| ph/seg (deg) | 64.7 | 43.9 | | | | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 76.9 | 76.6 | | | | | | | Bits/sample: 2x2 | SampCntNorm: enabled |
| ph/frq (deg) | 32.5 | 26.5 | | | | | | | Sample rate(MISamp/s): 128 | mb window (us) -0.008 0.008 |
| amp/frq (%) | 66.9 | 46.2 | | | | | | | 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 |

I: az 105.4 el 23.4 pa -51.4 X: az 241.2 el 19.3 pa 28.3 u,v (fr/asec) -10365.400 -2304.144 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/IX..196R8V Output file: /Exps/c201e/v1/1234/No0049/IX.W.183.196R8V



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

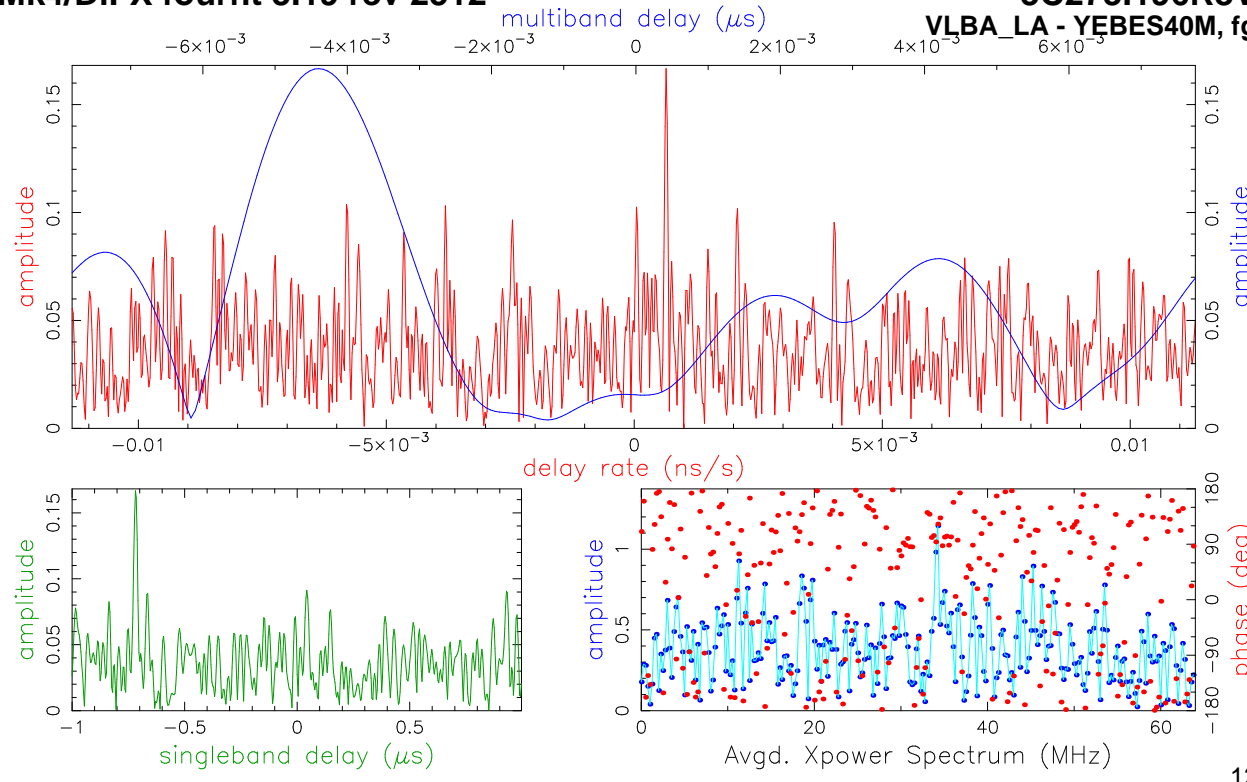


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| I:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Y | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | -4.11417863572E+03 | Apriori delay (usec) | -4.11410020707E+03 | Resid mbdelay (usec) | -3.03650E-04 | +/- | 1.7E-04 |
| Sband delay (usec) | -4.11418317157E+03 | Apriori clock (usec) | -1.5724545E+01 | Resid sbdelay (usec) | -8.29645E-02 | +/- | 1.4E-03 |
| Phase delay (usec) | -4.11410020149E+03 | Apriori clockrate (us/s) | -3.7100000E-07 | Resid phdelay (usec) | 5.57624E-06 | +/- | 5.9E-07 |
| Delay rate (us/s) | 1.88952768331E+00 | Apriori rate (us/s) | 1.88953007591E+00 | Resid rate (us/s) | -2.39260E-06 | +/- | 5.8E-09 |
| Total phase (deg) | -128.3 | Apriori accel (us/s/s) | 2.15442921054E-05 | Resid phase (deg) | 172.9 | +/- | 18.2 |

| | | | | | | | | | | |
|--------------|------|------------------|-------|----------------|-----------------|------------------------|-----------------------------|----------------------|----------------|--------------|
| ph/seg (deg) | 54.2 | Theor. | 43.7 | Amplitude | 0.179 +/- 0.029 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | |
| amp/seg (%) | 55.2 | Search (1024X32) | 0.173 | Interp. | 0.000 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 1.000 | |
| ph/frq (deg) | 12.6 | Inc. seg. avg. | 0.184 | Inc. frq. avg. | 0.165 | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| amp/frq (%) | 30.2 | Inc. frq. avg. | 0.165 | | | 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 | |

I: az 105.4 el 23.4 pa -51.4 Y: az 234.5 el 36.6 pa 38.3 u,v (fr/asec) -10816.933 -513.843 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/IY..196R8V Output file: /Exps/c201e/v1/1234/No0049/IY.W.150.196R8V

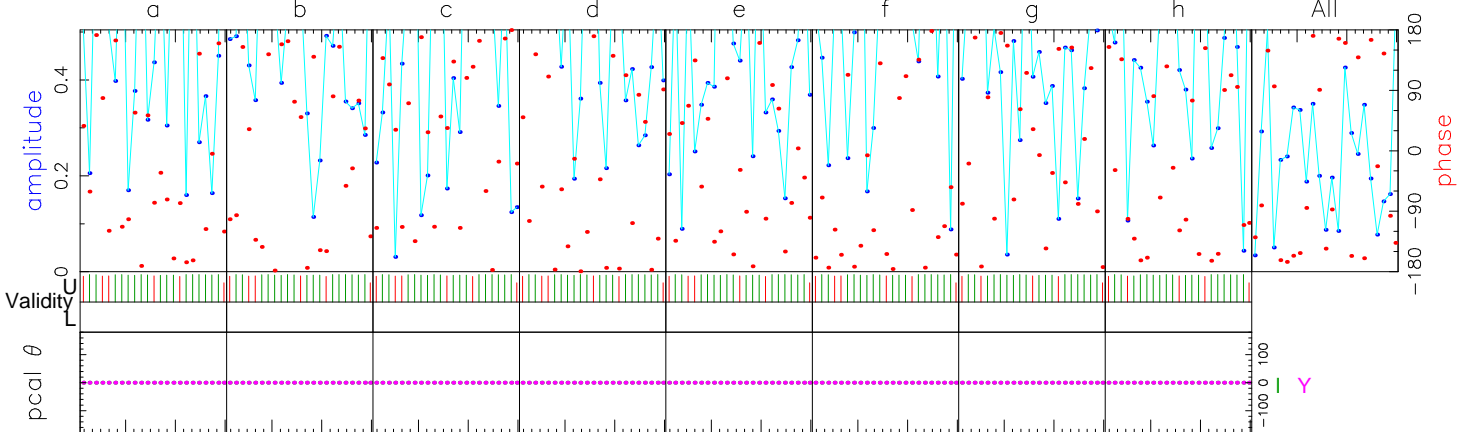


Fringe quality 0

SNR 6.0
Int time 170.670
Amp 0.168
Phase -167.2
PFD 2.3e-01
Delays (us)
SBD -0.717562
MBD -0.004374
Fringe rate (Hz) 0.055075
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

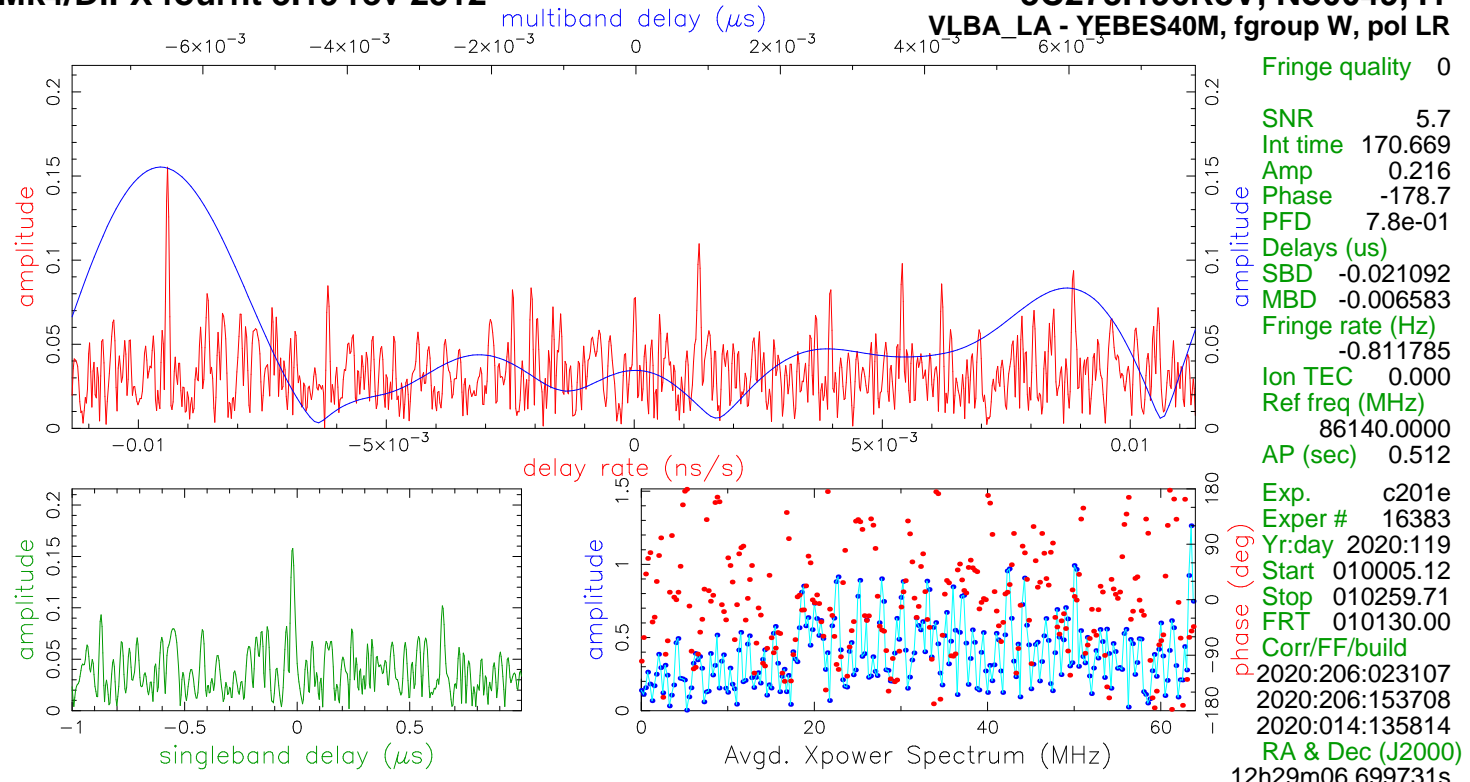
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010005.12
Stop 010259.71
FRT 010130.00
Corr/FF/build 2020:206:023107
2020:206:153704
2020:014:135814
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

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

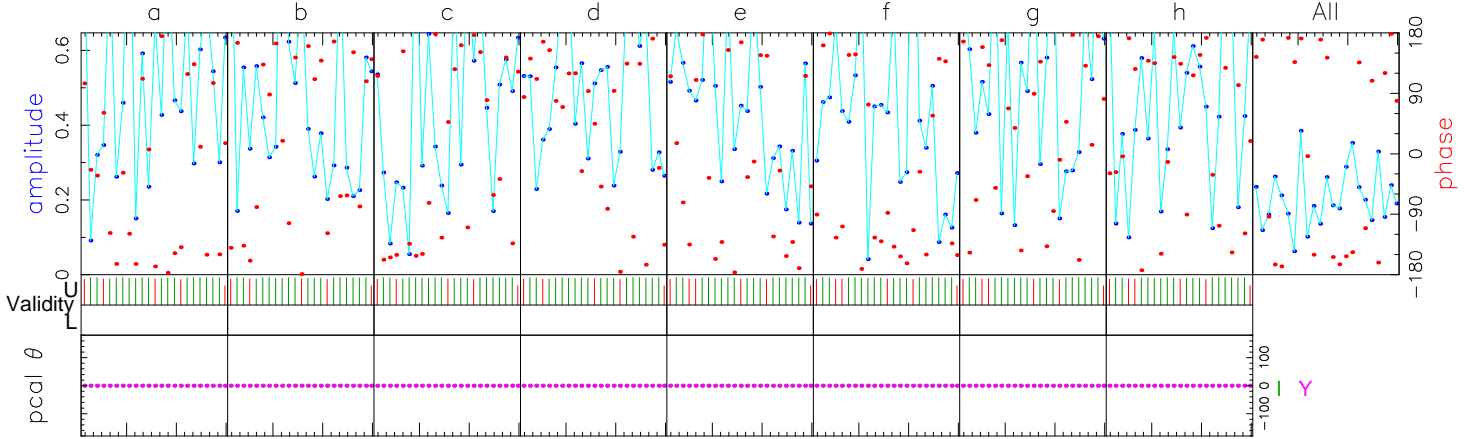


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|-----------|----------|----------|--------------------|----------|----------|----------|------------|-----|
| U/L | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| I:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Y | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -4.11482333154E+03 | | | | -4.11410020707E+03 | | | | | |
| Sband delay (usec) | -4.11481776907E+03 | | | | -1.5724545E+01 | | | | | |
| Phase delay (usec) | -4.11410021246E+03 | | | | -3.7100000E-07 | | | | | |
| Delay rate (us/s) | 1.88953071527E+00 | | | | 1.88953007591E+00 | | | | | |
| Total phase (deg) | | | -108.4 | | 2.15442921054E-05 | | | | | |
| 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 | | | MANUAL | | | | | |
| Pcal rate: | 0.000E+00 | 0.000E+00 | | | 0.000E+00 | | | | | |
| Bits/sample: | 2x2 | | | | | | | | | |
| Sample rate (MSamp/s): | 128 | | | | | | | | | |
| Data rate (Mb/s): | 2048 | | | | | | | | | |
| nlags: | 256 | | | | | | | | | |
| t_cohere: | infinite | | | | | | | | | |
| sb window (us) | -1.000 | 1.000 | | | | | | | | |
| mb window (us) | -0.008 | 0.008 | | | | | | | | |
| dr window (ns/s) | -0.011 | 0.011 | | | | | | | | |
| ion window (TEC) | 0.00 | 0.00 | | | | | | | | |

ph/seg (deg) 59.2 45.8 Search (1024X32) 0.165 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 89.3 79.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.4 27.0 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.8 47.1 Inc. frq. avg. 0.163 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 105.4 el 23.4 pa -51.4 Y: az 234.5 el 36.6 pa 38.3 u,v (fr/asec) -10816.933 -513.843 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/IY..196R8V Output file: /Exps/c201e/v1/1234/No0049/IY.W.159.196R8V



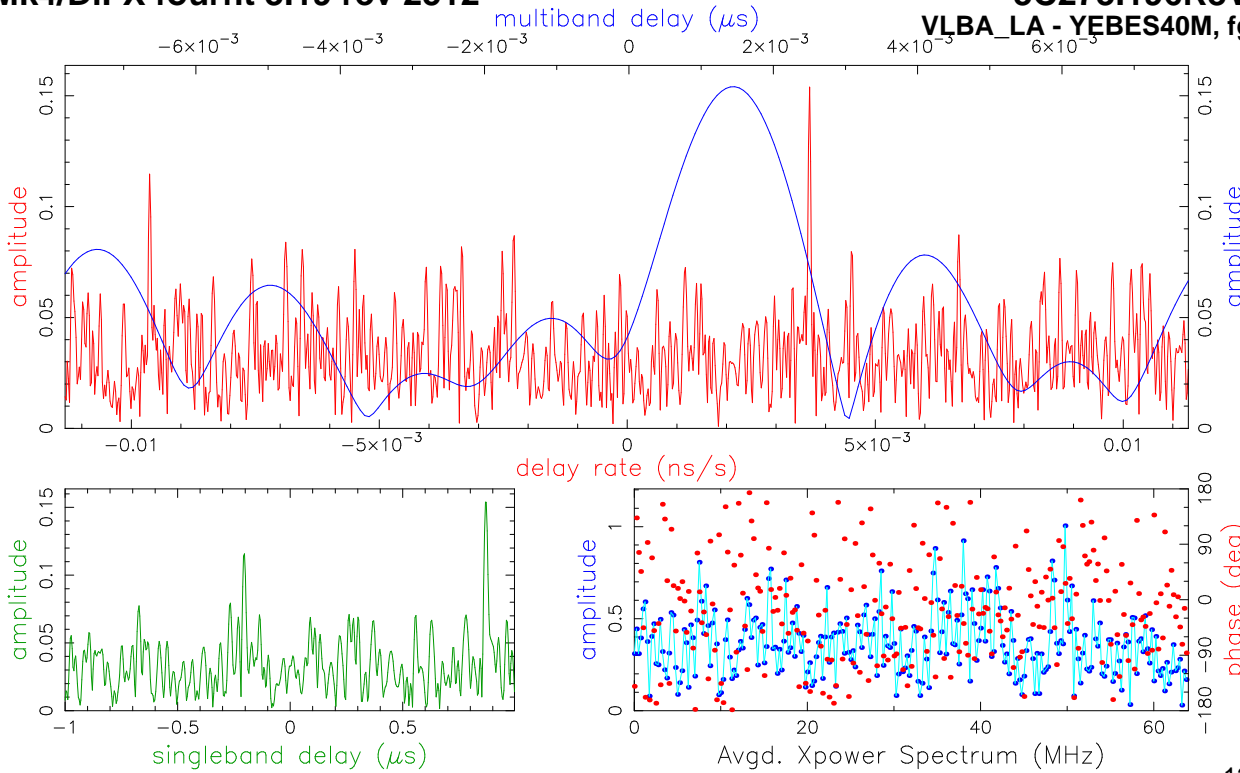
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|----------|----------|----------|--------------------|----------|----------|----------------------|--------------------------|
| | -178.0 | -169.4 | -176.1 | 129.3 | -159.3 | -145.5 | 172.0 | 159.7 | Phase | -178.7 |
| | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.4 | 0.2 | 0.2 | Ampl. | 0.2 |
| | 404.1 | 64.2 | 223.7 | 56.4 | 137.7 | 251.7 | 239.0 | 466.3 | Sbd box | 251.6 |
| U/L | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | APs used | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| I:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| I:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| Y | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -4.11412241492E+03 | | | | | -4.11410020707E+03 | | | Resid mbdelay (usec) | -6.58286E-03 +/- 1.9E-04 |
| Sband delay (usec) | -4.11412129882E+03 | | | | | -1.5724545E+01 | | | Resid sbdelay (usec) | -2.10917E-02 +/- 1.5E-03 |
| Phase delay (usec) | -4.11410021283E+03 | | | | | -3.7100000E-07 | | | Resid phdelay (usec) | -5.76199E-06 +/- 6.5E-07 |
| Delay rate (us/s) | 1.88952065189E+00 | | | | | 1.88953007591E+00 | | | Resid rate (us/s) | -9.42401E-06 +/- 6.4E-09 |
| Total phase (deg) | | | -119.9 | | | 2.15442921054E-05 | | | Resid phase (deg) | -178.7 +/- 20.1 |

| | RMS | Theor. | Amplitude | 0.216 +/- 0.038 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | | |
|--------------|------|--------|------------------|-----------------|--|-----------------------|------------------|--------|-------|
| ph/seg (deg) | 55.7 | 48.2 | Search (1024X32) | 0.152 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 | 1.000 | |
| amp/seg (%) | 57.7 | 84.2 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 28.4 | 28.4 | Inc. seg. avg. | 0.207 | Sample rate(MISamp/s): 128 | | dr window (ns/s) | -0.011 | 0.011 |
| amp/frq (%) | 36.6 | 49.7 | Inc. frq. avg. | 0.207 | Data rate(Mb/s): 2048 | nlags: 256 | ion window (TEC) | 0.00 | 0.00 |

I: az 105.4 el 23.4 pa -51.4 Y: az 234.5 el 36.6 pa 38.3 u,v (fr/asec) -10816.933 -513.843 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/IY..196R8V Output file: /Exps/c201e/v1/1234/No0049/IY.W.185.196R8V

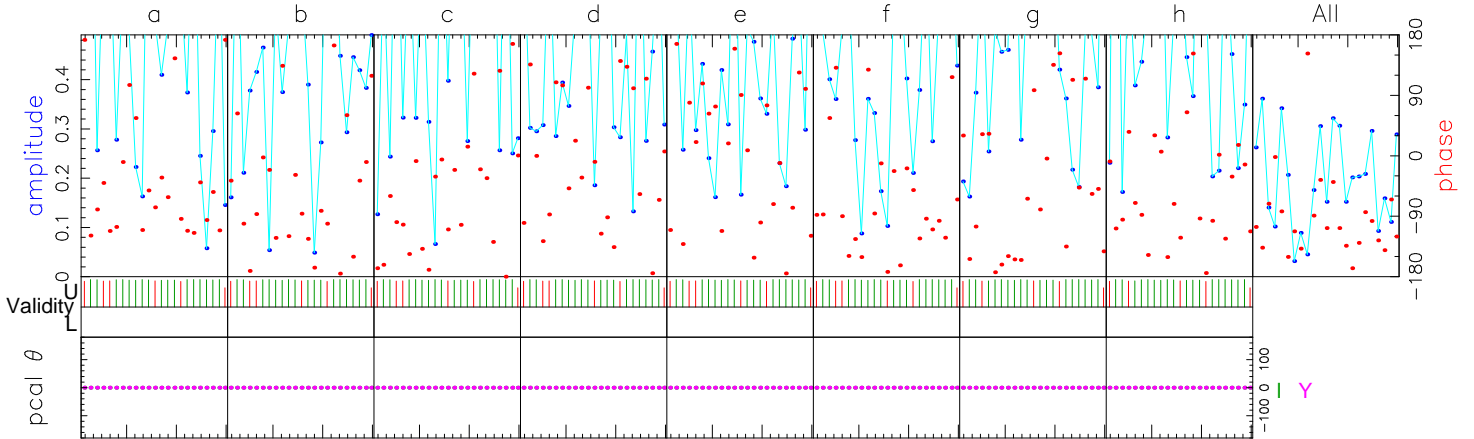


Fringe quality 0

SNR 5.6
Int time 170.670
Amp 0.164
Phase -102.6
PFD 9.3e-01
Delays (us)
SBD 0.869089
MBD 0.001496
Fringe rate (Hz) 0.316420
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 010005.12
Stop 010259.71
FRT 010130.00
Corr/FF/build 2020:206:023107
2020:206:153710
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

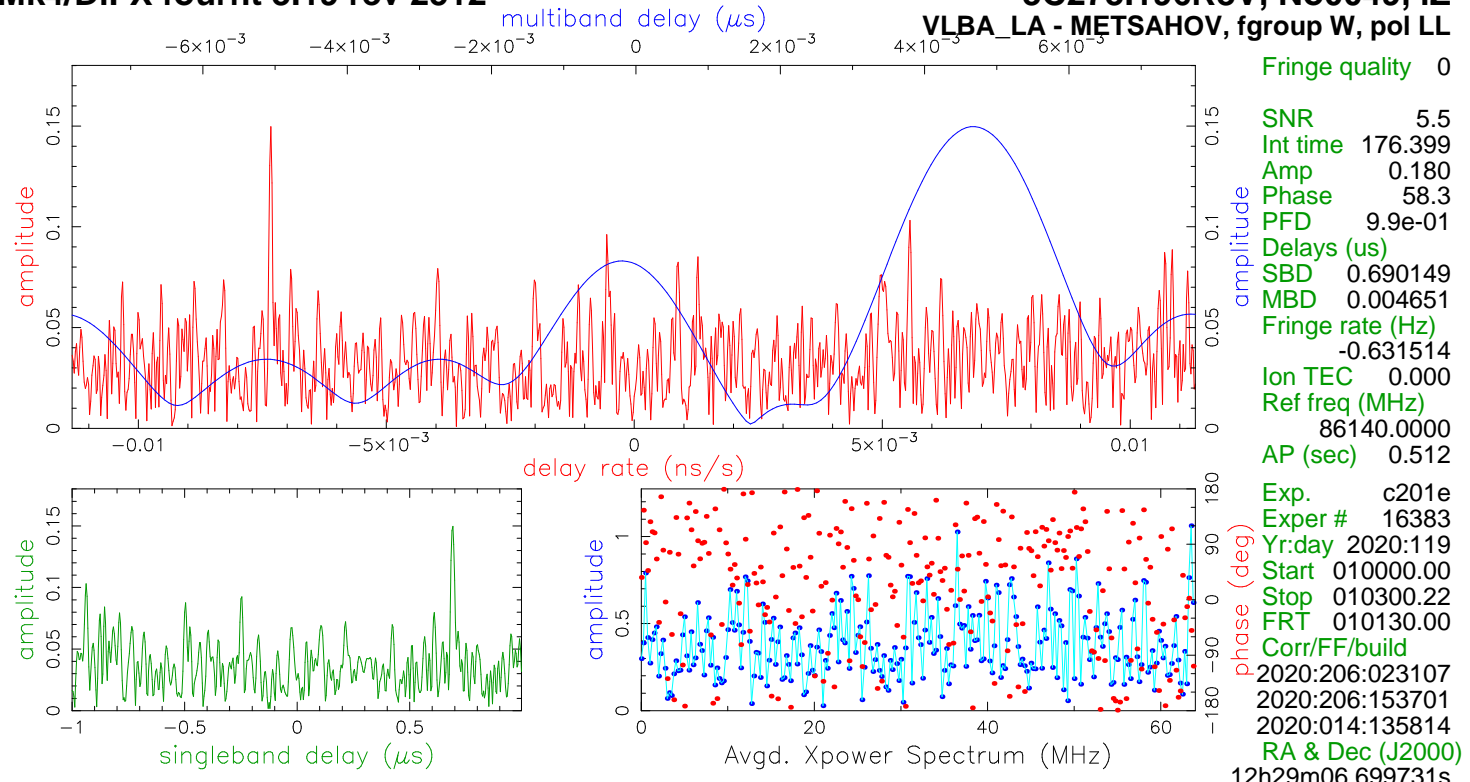


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -92.7 | -101.1 | -103.5 | -84.8 | -177.3 | -106.8 | -149.1 | -81.4 | Phase | -102.6 |
| | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | Ampl. | 0.2 |
| | 481.5 | 154.9 | 418.6 | 231.0 | 369.2 | 457.4 | 471.5 | 219.6 | Sbd box | 479.5 |
| U/L | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | 341/0 | APs used | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| I:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| I:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| Y | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -4.11322371086E+03 | | Apriori delay (usec) | | -4.11410020707E+03 | | Resid mbdelay (usec) | | 1.49620E-03 | +/- 1.9E-04 |
| Sband delay (usec) | -4.11323111757E+03 | | Apriori clock (usec) | | -1.5724545E+01 | | Resid sbdelay (usec) | | 8.69089E-01 | +/- 1.5E-03 |
| Phase delay (usec) | -4.11410021038E+03 | | Apriori clockrate (us/s) | | -3.7100000E-07 | | Resid phdelay (usec) | | -3.30865E-06 | +/- 6.6E-07 |
| Delay rate (us/s) | 1.88953374923E+00 | | Apriori rate (us/s) | | 1.88953007591E+00 | | Resid rate (us/s) | | 3.67332E-06 | +/- 6.5E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.15442921054E-05 | | Resid phase (deg) | | -102.6 | +/- 20.5 |

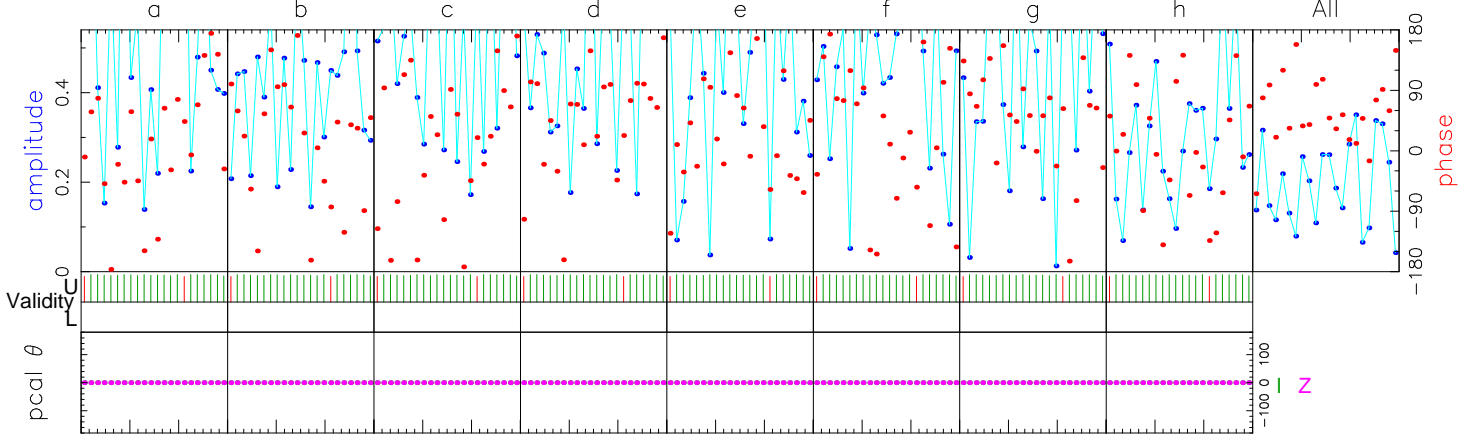
| | RMS | Theor. | Amplitude | 0.164 +/- 0.029 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|--|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 44.8 | 49.1 | Search (1024X32) | 0.151 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 66.0 | 85.7 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 37.9 | 28.9 | Inc. seg. avg. | 0.150 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 42.7 | 50.5 | Inc. frq. avg. | 0.155 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

I: az 105.4 el 23.4 pa -51.4 Y: az 234.5 el 36.6 pa 38.3 u,v (fr/asec) -10816.933 -513.843 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/IY..196R8V Output file: /Exps/c201e/v1/1234/No0049/IY.W.197.196R8V



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



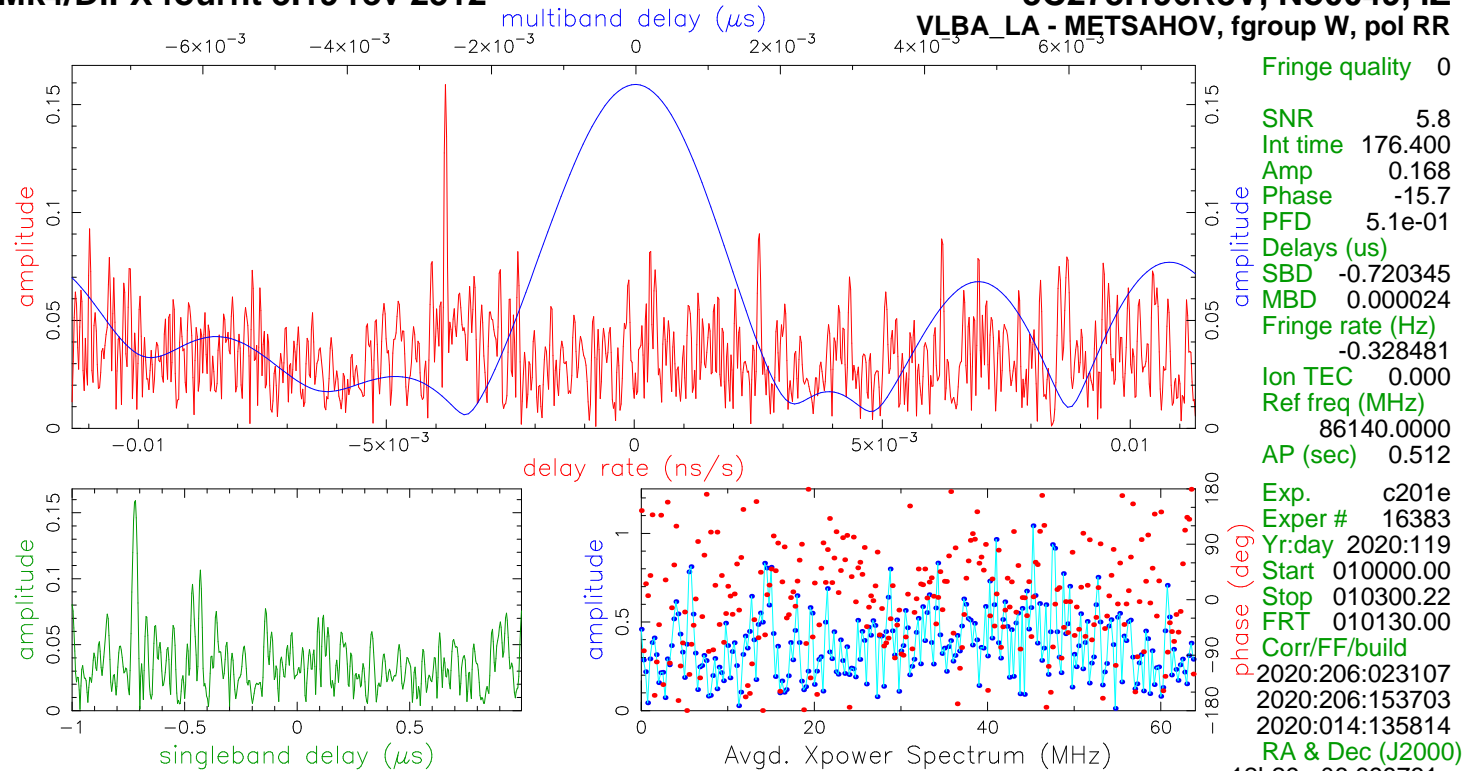
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| 36.2 | 49.4 | 83.9 | 86.4 | 23.1 | 44.8 | 74.4 | 12.8 | 12.8 | Phase | 58.3 |
| 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.3 | 0.1 | 0.1 | Ampl. | 0.2 |
| 147.3 | 421.8 | 37.8 | 434.2 | 423.7 | 502.3 | 432.3 | 36.1 | 36.1 | Sbd box | 433.7 |
| U/L 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| I 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Z 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| I:Z 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| I:Z 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| I 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| Z 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | Chan ids | |
| Z W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | Tracks | |

| | | | | | | | |
|-------------------------|-------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 4.07197748173E+03 | Apriori delay (usec) | 4.07128533064E+03 | Resid mbdelay (usec) | 4.65110E-03 | +/- | 2.0E-04 |
| Sband delay (usec) | 4.07197547989E+03 | Apriori clock (usec) | -3.6175098E+00 | Resid sbdelay (usec) | 6.90149E-01 | +/- | 1.6E-03 |
| Phase delay (usec) | 4.07128533252E+03 | Apriori clockrate (us/s) | -1.6700000E-07 | Resid phdelay (usec) | 1.88007E-06 | +/- | 6.8E-07 |
| Delay rate (us/s) | 1.83109257208E+00 | Apriori rate (us/s) | 1.83109990333E+00 | Resid rate (us/s) | -7.33125E-06 | +/- | 6.5E-09 |
| Total phase (deg) | 195.5 | Apriori accel (us/s/s) | -2.27499145325E-05 | Resid phase (deg) | 58.3 | +/- | 20.9 |

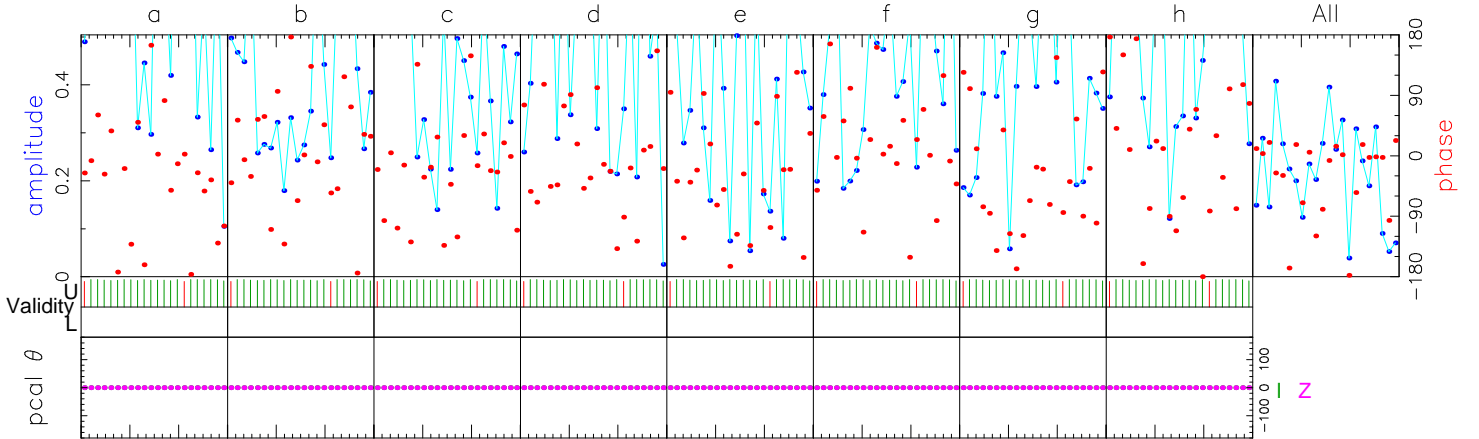
| | | | | | | | | | | | | |
|--------------|------|--------|------|------------------|-----------------|------------------------|-----------------------------|----------------------|----------------|-------------------|------------------|-----------|
| ph/seg (deg) | 50.8 | Theor. | 49.1 | Amplitude | 0.180 +/- 0.033 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | | | |
| amp/seg (%) | 68.8 | | 85.7 | Search (1024X32) | 0.149 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 1.000 | | | |
| ph/frq (deg) | 31.0 | | 29.6 | Interp. | 0.000 | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 | | |
| amp/frq (%) | 44.2 | | 51.7 | Inc. seg. avg. | 0.172 | Sample rate (MSamp/s): | 128 | dr window (ns/s) | -0.011 0.011 | | | |
| | | | | Inc. frq. avg. | 0.175 | Data rate (Mb/s): | 2048 | nlags: | 256 | t_cohere infinite | ion window (TEC) | 0.00 0.00 |

I: az 105.4 el 23.4 pa -51.4 Z: az 251.9 el 12.3 pa 28.2 u,v (fr/asec) -10505.253 -2566.709 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/IZ..196R8V Output file: /Exps/c201e/v1/1234/No0049/IZ.W.145.196R8V



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 |
|-------------------------|-------------------|----------|----------|------------------|----------|--------------------|----------|----------|--|-------------------------------|
| | -21.8 | 20.3 | -39.1 | -12.8 | -18.8 | 15.9 | -70.5 | 23.0 | Phase | -15.7 |
| | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | Ampl. | 0.2 |
| | 387.8 | 219.5 | 87.7 | 73.1 | 116.1 | 511.6 | 66.8 | 67.2 | Sbd box | 72.6 |
| U/L | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | 352/0 | APs used | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| I:Z | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| I:Z | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| Z | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 4.07056660441E+03 | | | | | 4.07128533064E+03 | | | Resid mbdelay (usec) | 2.37727E-05 +/- 1.9E-04 |
| Sband delay (usec) | 4.07056498514E+03 | | | | | -3.6175098E+00 | | | Resid sbdelay (usec) | -7.20345E-01 +/- 1.5E-03 |
| Phase delay (usec) | 4.07128533013E+03 | | | | | -1.6700000E-07 | | | Resid phdelay (usec) | -5.04986E-07 +/- 6.3E-07 |
| Delay rate (us/s) | 1.83109609000E+00 | | | | | 1.83109990333E+00 | | | Resid rate (us/s) | -3.81333E-06 +/- 6.1E-09 |
| Total phase (deg) | | | 121.5 | | | -2.27499145325E-05 | | | Resid phase (deg) | -15.7 +/- 19.7 |
| | | | | | | | | | PCal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| ph/seg (deg) | 61.8 | 46.1 | | Search (1024X32) | 0.156 | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -1.000 1.000 |
| amp/seg (%) | 73.3 | 80.5 | | Interp. | 0.000 | | | | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 35.1 | 27.8 | | Inc. seg. avg. | 0.173 | | | | Sample rate(MISamp/s): 128 | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 30.4 | 48.5 | | Inc. frq. avg. | 0.171 | | | | Data rate(Mb/s): 2048 | ion window (TEC) 0.00 0.00 |
| | | | | | | | | | nlags: 256 | t_cohere infinite |

I: az 105.4 el 23.4 pa -51.4 Z: az 251.9 el 12.3 pa 28.2 u,v (fr/asec) -10505.253 -2566.709 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0049/IZ..196R8V Output file: /Exps/c201e/v1/1234/No0049/IZ.W.158.196R8V

