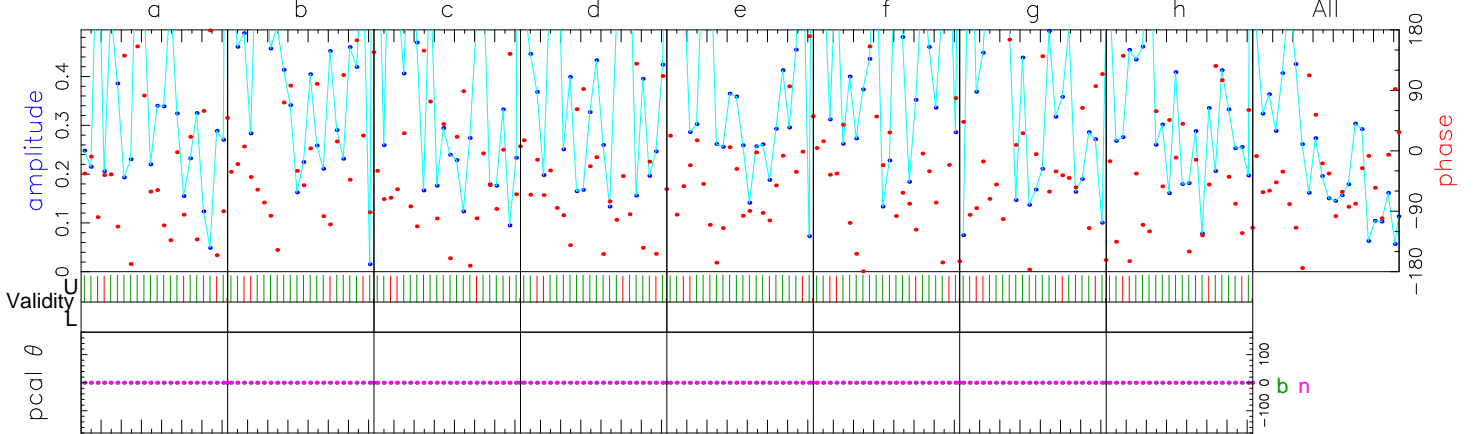


Fringe quality 9

SNR 9.1
Int time 405.018
Amp 0.165
Phase -53.3
PFD 3.7e-11
Delays (us)
SBD 0.005800
MBD 0.004645
Fringe rate (Hz) 0.002090
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143527
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

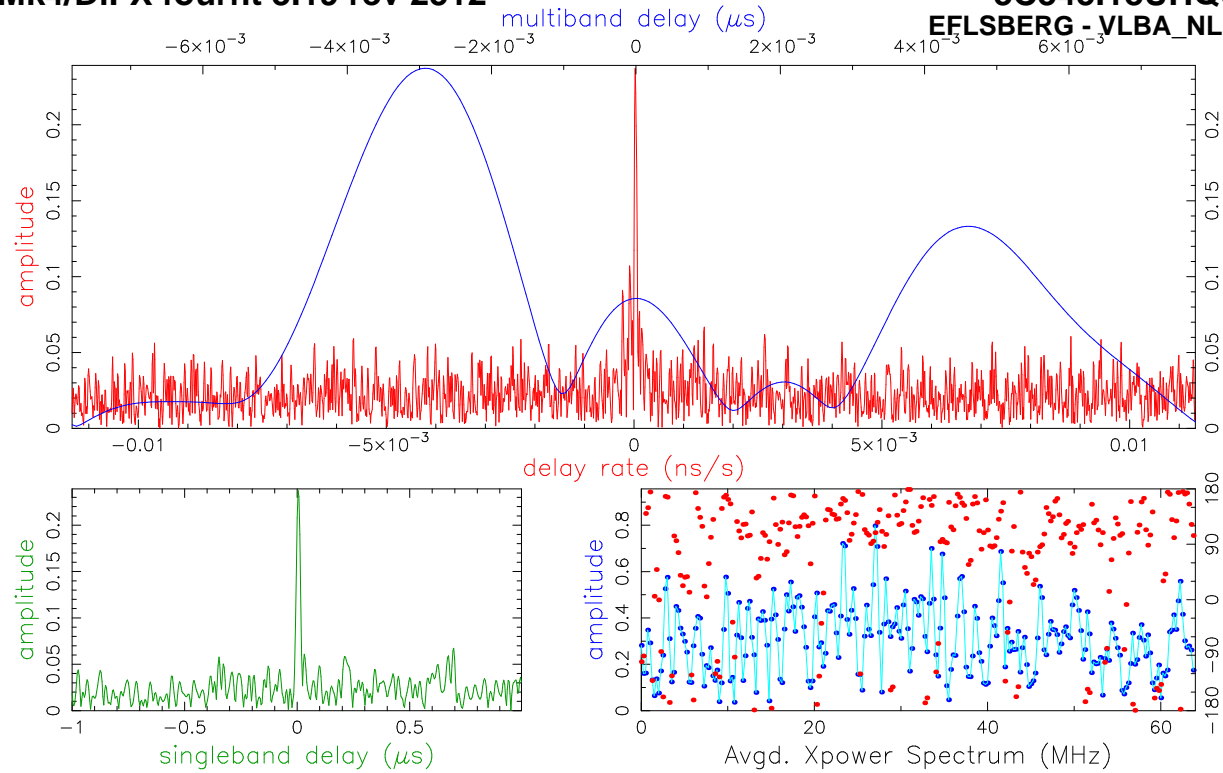
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -96.5 | -35.8 | -47.2 | -65.3 | -41.9 | -34.8 | -61.1 | -70.9 | Phase | -53.3 |
| | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | Ampl. | 0.2 |
| | 256.1 | 47.7 | 128.1 | 258.1 | 258.0 | 61.7 | 259.3 | 86.4 | Sbd box | 258.5 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| b:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| b:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -1.22221123261E+03 | | Apriori delay (usec) | | -1.22221587712E+03 | | Resid mbdelay (usec) | | 4.64451E-03 | +/- 1.2E-04 |
| Sband delay (usec) | -1.22221007737E+03 | | Apriori clock (usec) | | -3.3698444E+01 | | Resid sbdelay (usec) | | 5.79975E-03 | +/- 9.5E-04 |
| Phase delay (usec) | -1.22221587884E+03 | | Apriori clockrate (us/s) | | -3.7599999E-07 | | Resid phdelay (usec) | | -1.71966E-06 | +/- 4.1E-07 |
| Delay rate (us/s) | 3.86254296880E-01 | | Apriori rate (us/s) | | 3.86254272619E-01 | | Resid rate (us/s) | | 2.42610E-08 | +/- 1.7E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 1.19927913740E-05 | | Resid phase (deg) | | -53.3 | +/- 12.6 |

ph/seg (deg) 65.9 30.2 Theor. Amplitude 0.165 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 98.0 52.7 Search (2048X32) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.1 17.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.2 31.1 Inc. seg. avg. 0.219 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.161 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 104.8 el 69.8 pa -57.1 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2850.211 1361.938 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/bn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bn.W.10.18UHQS

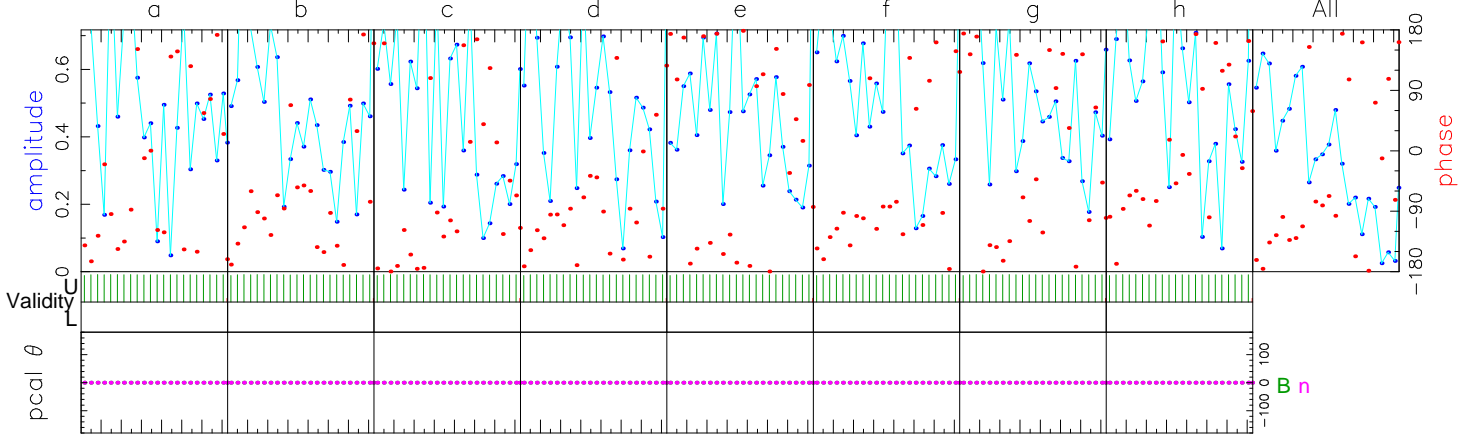


Fringe quality 9

SNR 13.3
Int time 415.115
Amp 0.239
Phase -134.5
PFD 9.3e-32
Delays (us)
SBD 0.005190
MBD -0.002880
Fringe rate (Hz) 0.001619
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

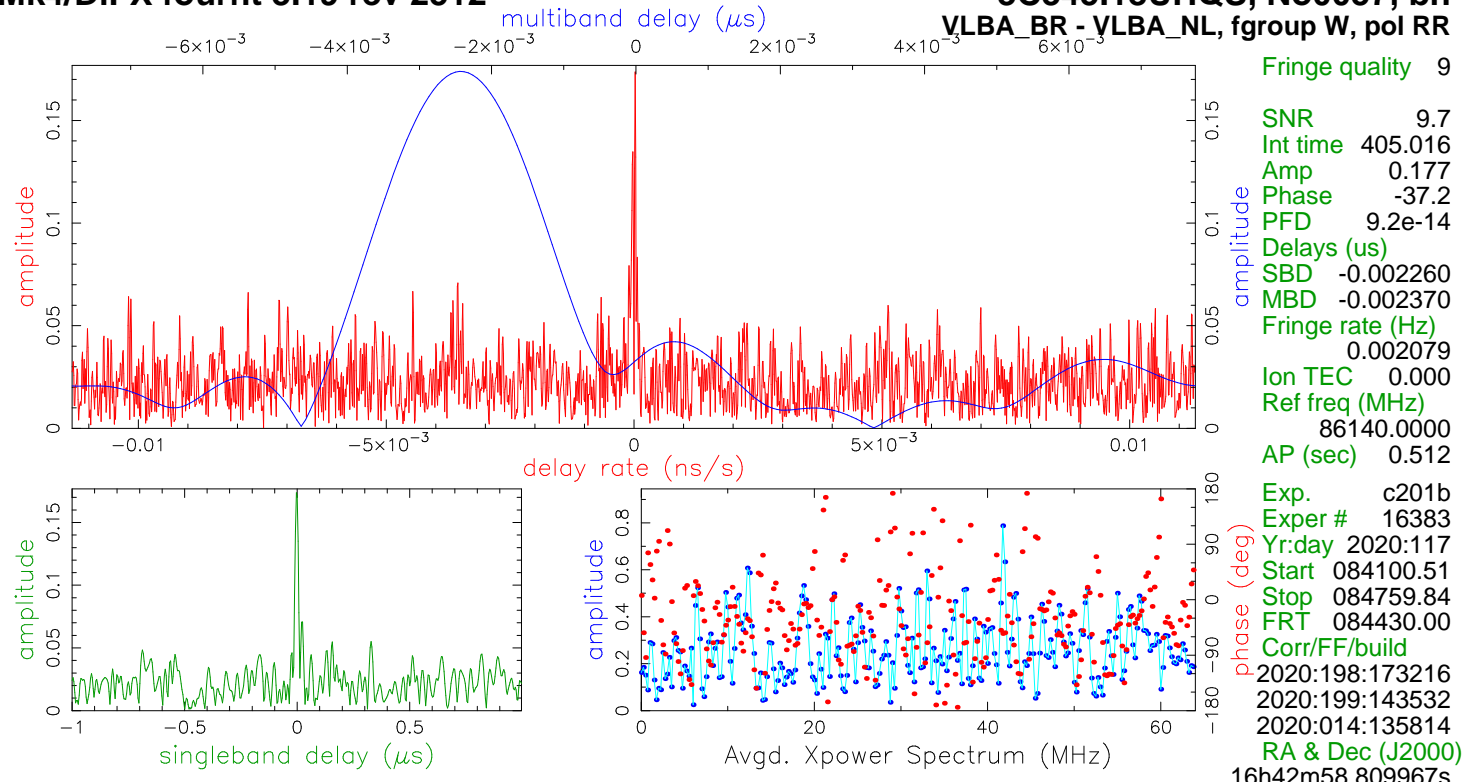
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143527
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

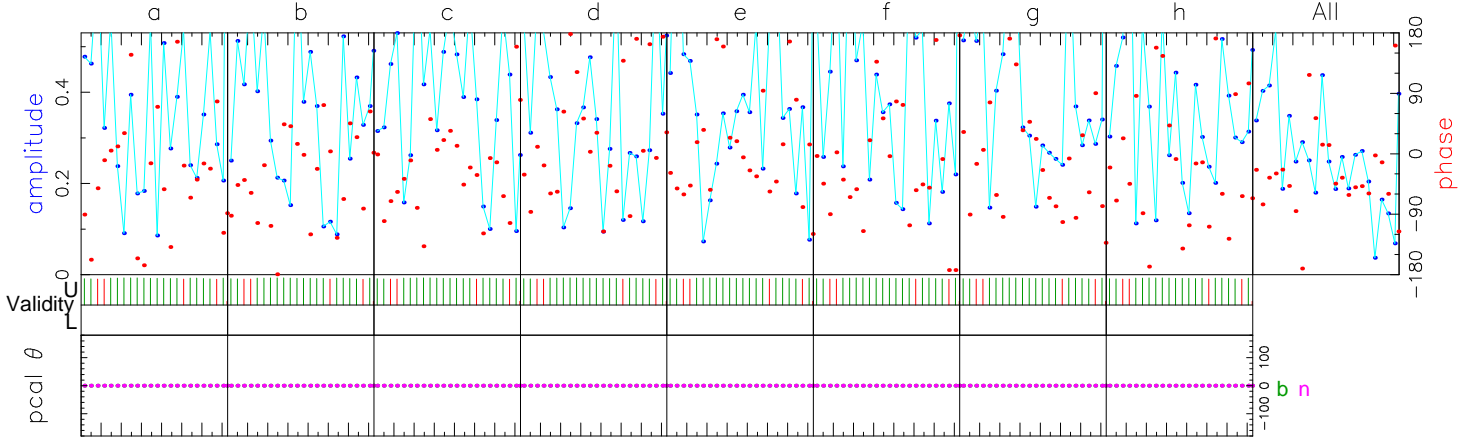


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -138.5 | -106.5 | -152.8 | -108.1 | 172.4 | -123.4 | -171.7 | -89.1 | Phase | -134.5 |
| | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | Ampl. | 0.3 |
| | 259.2 | 257.8 | 258.3 | 259.0 | 259.4 | 258.9 | 259.0 | 259.3 | Sbd box | 258.3 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -1.29222563545E+04 | | Apriori delay (usec) | | -1.29222690997E+04 | | Resid mbdelay (usec) | | -2.87980E-03 | +/- 8.1E-05 |
| Sband delay (usec) | -1.29222639097E+04 | | Apriori clock (usec) | | -1.9240480E+01 | | Resid sbdelay (usec) | | 5.19000E-03 | +/- 6.5E-04 |
| Phase delay (usec) | -1.29222691040E+04 | | Apriori clockrate (us/s) | | -5.3399998E-07 | | Resid phdelay (usec) | | -4.33882E-06 | +/- 2.8E-07 |
| Delay rate (us/s) | -6.89852986612E-01 | | Apriori rate (us/s) | | -6.89853005408E-01 | | Resid rate (us/s) | | 1.87966E-08 | +/- 1.1E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 7.62542289440E-05 | | Resid phase (deg) | | -134.5 | +/- 8.6 |

ph/seg (deg) 68.0 20.6 Search (2048X32) 0.235 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 89.9 36.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.0 12.2 Inc. seg. avg. 0.319 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.8 21.2 Inc. frq. avg. 0.272 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 304.4 el 23.7 pa 42.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) 5304.994 5627.834 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/Bn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Bn.W.11.18UHQS



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

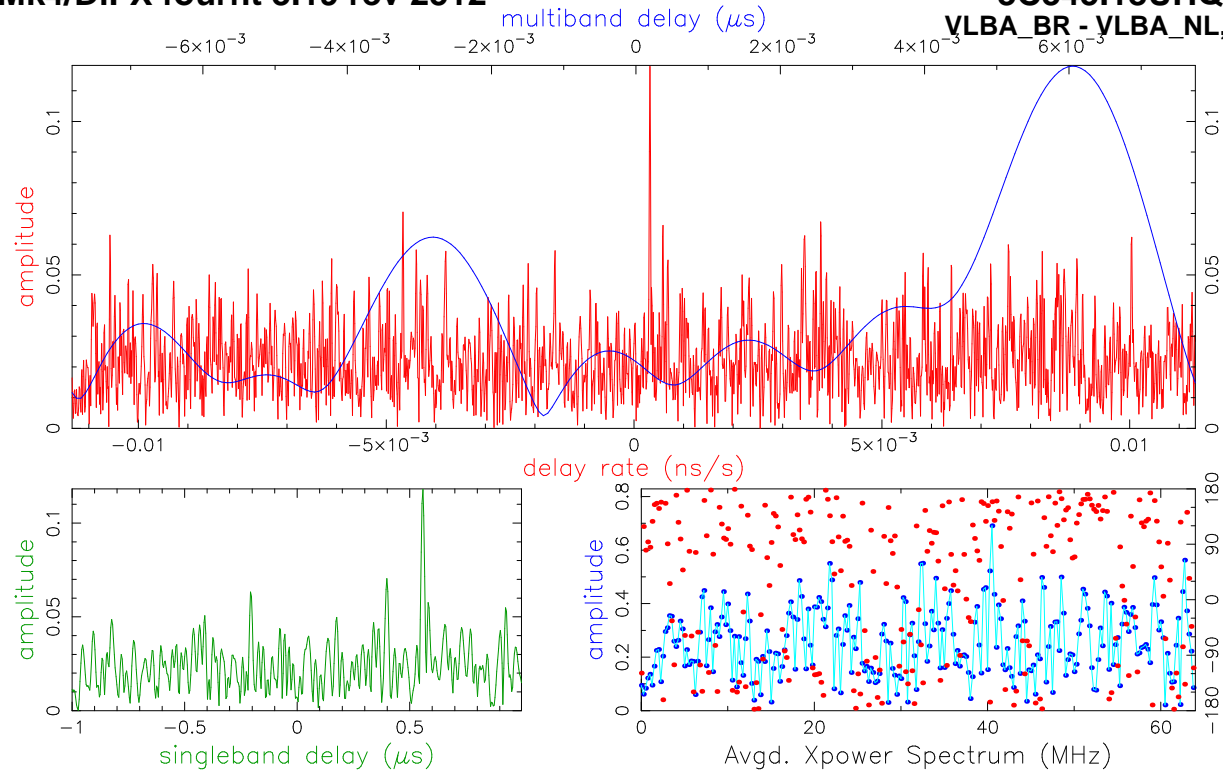


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -46.0 | -33.2 | -34.1 | -21.1 | -31.5 | -53.3 | -33.2 | -52.7 | Phase | -37.2 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | Ampl. | 0.2 |
| | 231.5 | 255.9 | 257.1 | 330.6 | 256.6 | 257.0 | 175.0 | 399.6 | Sbd box | 256.4 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| b:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| b:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -1.22221824686E+03 | | Apriori delay (usec) | | -1.22221587712E+03 | | Resid mbdelay (usec) | | -2.36974E-03 | +/- 1.1E-04 |
| Sband delay (usec) | -1.22221813687E+03 | | Apriori clock (usec) | | -3.3698444E+01 | | Resid sbdelay (usec) | | -2.25975E-03 | +/- 8.9E-04 |
| Phase delay (usec) | -1.22221587832E+03 | | Apriori clockrate (us/s) | | -3.7599999E-07 | | Resid phdelay (usec) | | -1.19945E-06 | +/- 3.8E-07 |
| Delay rate (us/s) | 3.86254296749E-01 | | Apriori rate (us/s) | | 3.86254272619E-01 | | Resid rate (us/s) | | 2.41299E-08 | +/- 1.6E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 1.19927913740E-05 | | Resid phase (deg) | | -37.2 | +/- 11.8 |

| | RMS | Theor. | Amplitude | 0.177 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|--|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 64.1 | 28.2 | Search (2048X32) | 0.172 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 80.7 | 49.3 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 12.3 | 16.7 | Inc. seg. avg. | 0.230 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 23.4 | 29.1 | Inc. frq. avg. | 0.169 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |

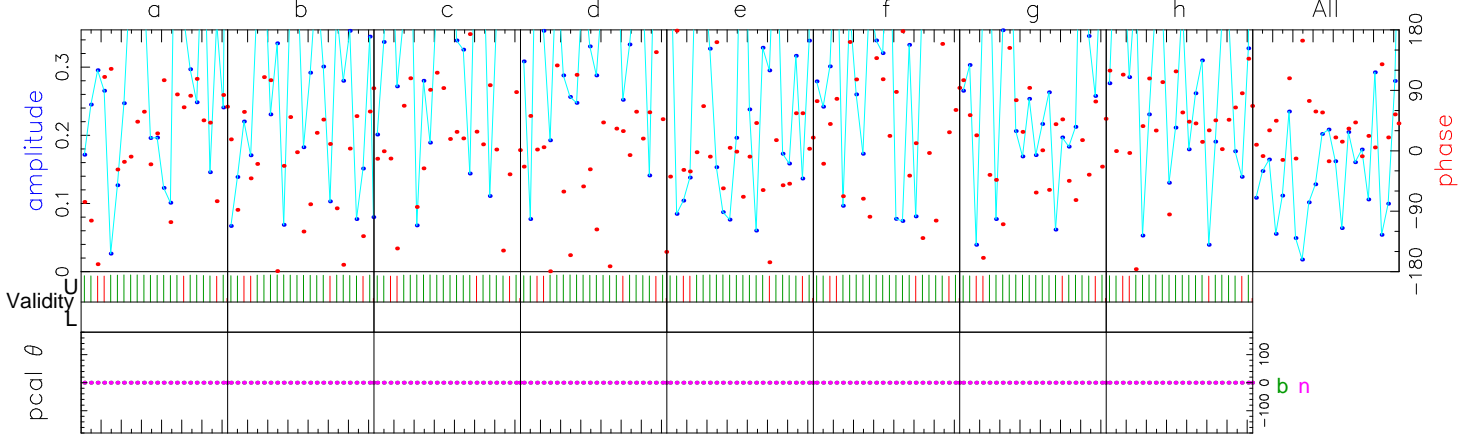
b: az 104.8 el 69.8 pa -57.1 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2850.211 1361.938 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/bn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bn.W.32.18UHQS



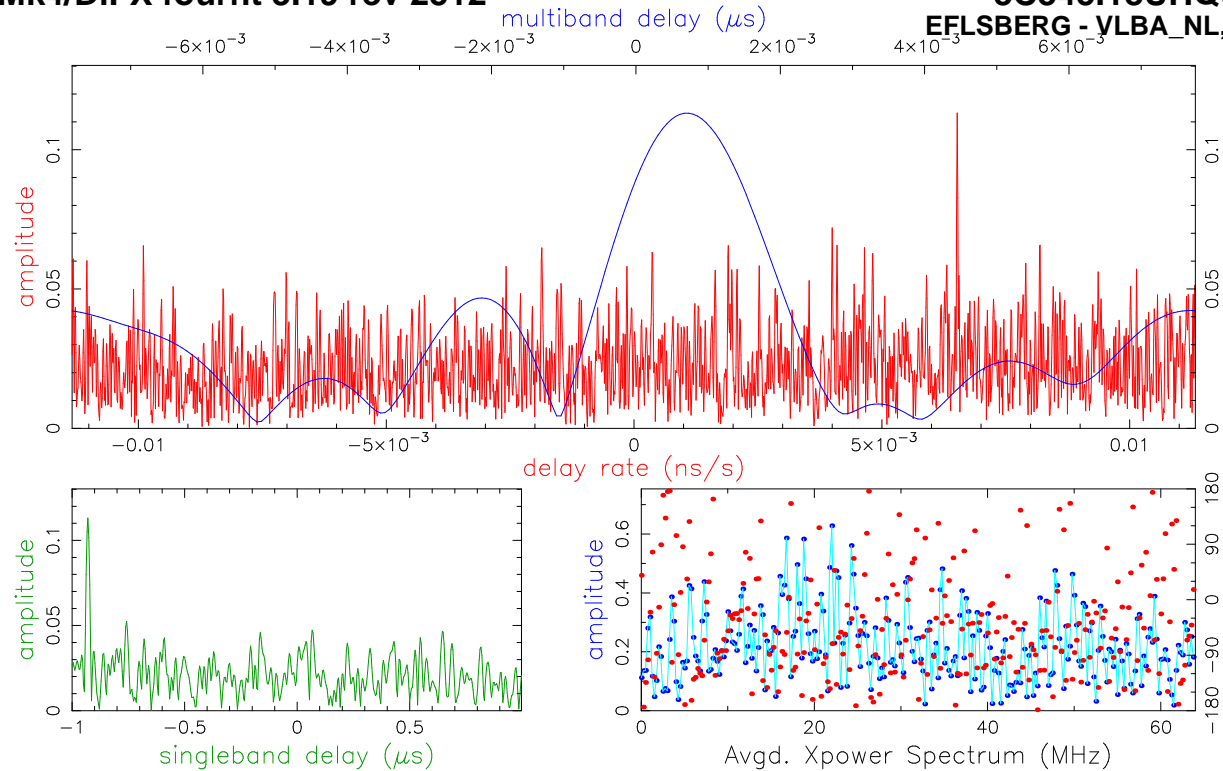
Fringe quality 0
SNR 6.5
Int time 405.017
Amp 0.118
Phase 30.2
PFD 2.1e-02
Delays (us)
SBD 0.558013
MBD 0.006037
Fringe rate (Hz) 0.027548
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143536
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|------------------|-----------------|--|----------|----------|----------|------------------------------|-----------------------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| b:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -1.22166296503E+03 | | | | -1.22221587712E+03 | | | | 6.03708E-03 | +/- 1.7E-04 |
| Sband delay (usec) | -1.22165786437E+03 | | | | -3.3698444E+01 | | | | 5.58013E-01 | +/- 1.3E-03 |
| Phase delay (usec) | -1.22221587614E+03 | | | | -3.7599999E-07 | | | | 9.75175E-07 | +/- 5.7E-07 |
| Delay rate (us/s) | 3.86254592421E-01 | | | | 3.86254272619E-01 | | | | 3.19801E-07 | +/- 2.3E-09 |
| Total phase (deg) | | | -205.5 | | 1.19927913740E-05 | | | | 30.2 | +/- 17.6 |
| | RMS | Theor. | Amplitude | 0.118 +/- 0.018 | Pcal mode: MANUAL, MANUAL | | | | PC period (AP's) 5, 5 | |
| ph/seg (deg) | 46.9 | 42.2 | Search (2048X32) | 0.116 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 70.4 | 73.7 | Interp. | 0.000 | Bits/sample: 2x2 | | | | SampCntNorm: enabled | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 28.0 | 24.9 | Inc. seg. avg. | 0.114 | Sample rate(MSamp/s): 128 | | | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 37.1 | 43.5 | Inc. frq. avg. | 0.119 | Data rate(Mb/s): 2048 | | | | nlags: 256 t_cohere infinite | ion window (TEC) 0.00 0.00 |

b: az 104.8 el 69.8 pa -57.1 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2850.211 1361.938 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/bn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bn.W.47.18UHQS

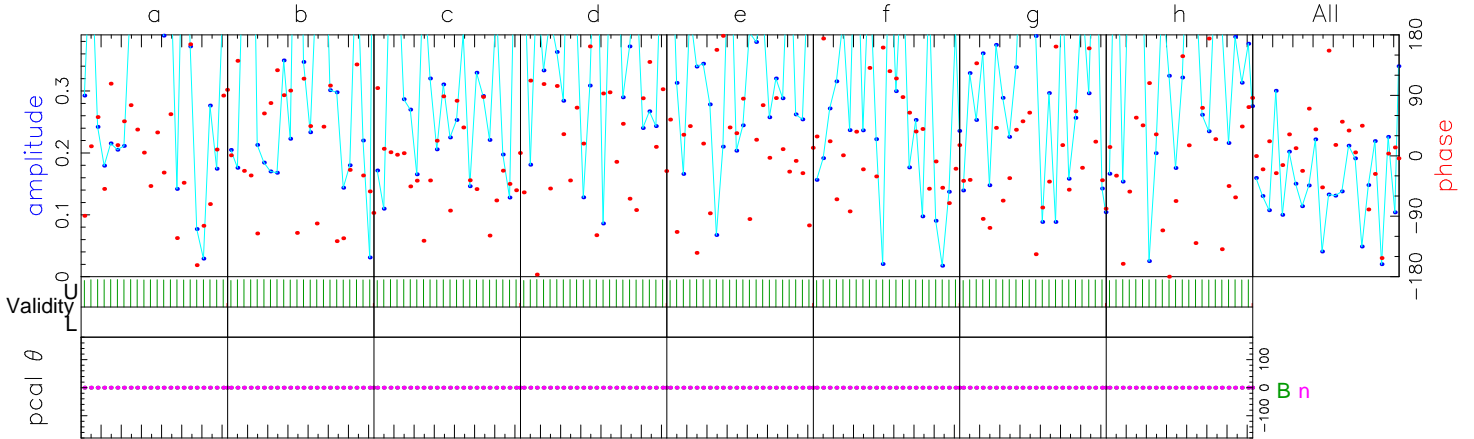


Fringe quality 0

SNR 6.3
Int time 415.115
Amp 0.130
Phase 7.7
PFD 7.4e-02
Delays (us)
SBD -0.930036
MBD 0.000696
Fringe rate (Hz) 0.562245
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143537
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

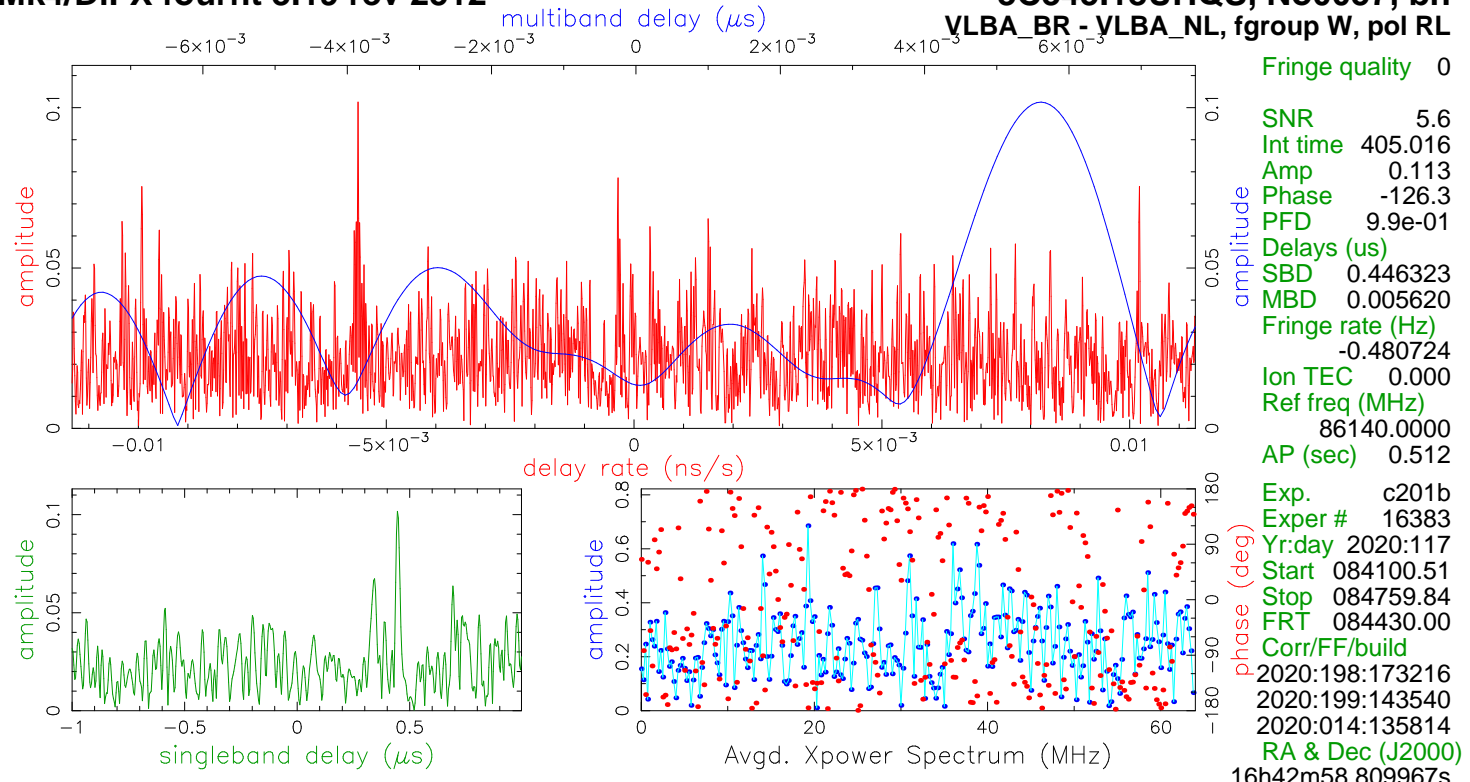


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--|--------------------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -1.29232059036E+04 | | | | | | | | 6.96082E-04 | +/- 1.7E-04 |
| Sband delay (usec) | -1.29231991354E+04 | | | | | | | | -9.30036E-01 | +/- 1.4E-03 |
| Phase delay (usec) | -1.29222690995E+04 | | | | | | | | 2.46927E-07 | +/- 5.9E-07 |
| Delay rate (us/s) | -6.89846478299E-01 | | | | | | | | 6.52711E-06 | +/- 2.4E-09 |
| Total phase (deg) | | | -81.6 | | | | | | 7.7 | +/- 18.2 |
| 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) | | | | | | | | | -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 |

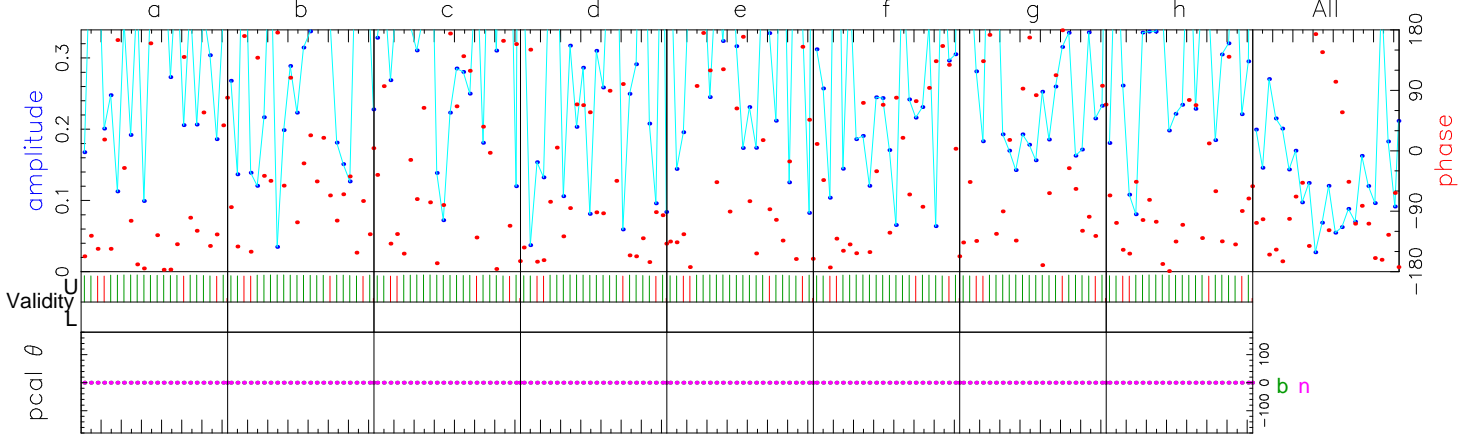
ph/seg (deg) 57.4 43.6 Amplitude 0.130 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.0 76.0 Search (2048X32) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.0 25.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.5 44.8 Inc. seg. avg. 0.133 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.123 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 304.4 el 23.7 pa 42.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) 5304.994 5627.834 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/Bn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Bn.W.52.18UHQS



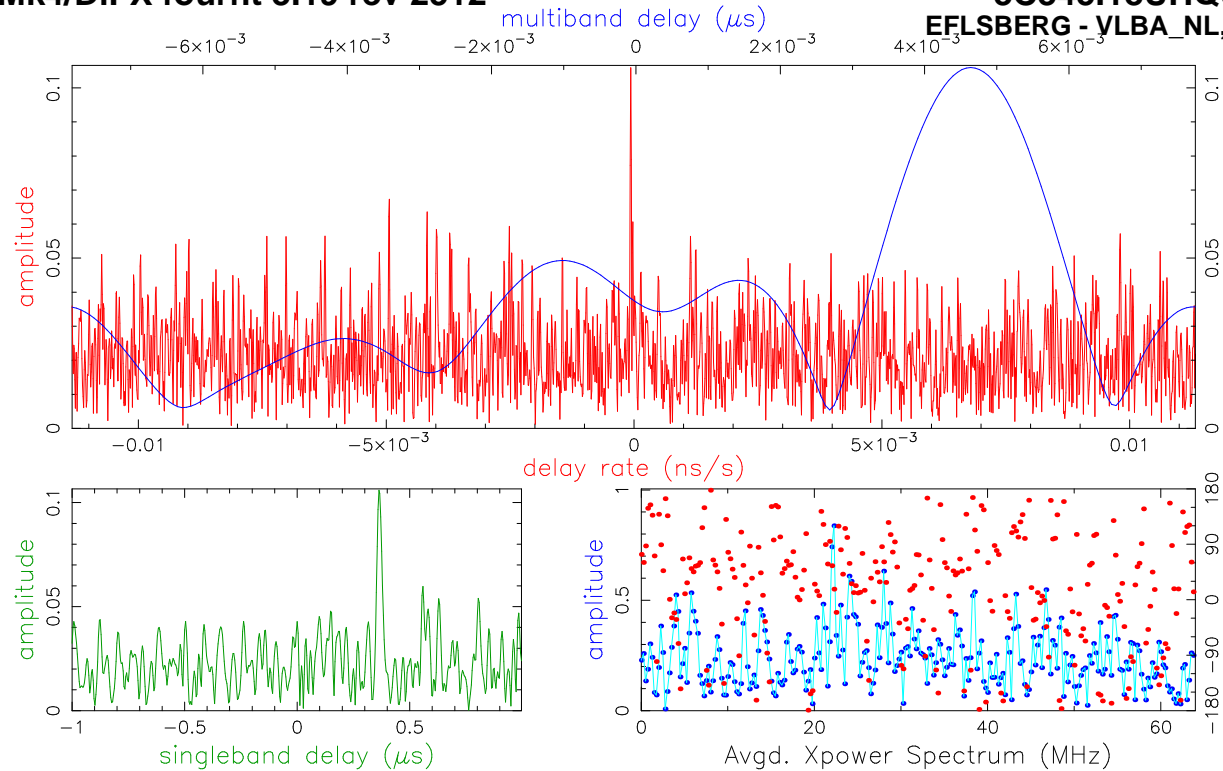
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -148.8 | -75.2 | -141.1 | -104.3 | -150.8 | -142.0 | -139.3 | -116.3 | Phase | -126.3 |
| | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | Ampl. | 0.1 |
| | 257.2 | 276.1 | 243.3 | 192.1 | 46.6 | 58.8 | 132.1 | 234.0 | Sbd box | 371.3 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| b:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| b:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -1.22177275680E+03 | | Apriori delay (usec) | | -1.22221587712E+03 | | Resid mbdelay (usec) | | 5.62032E-03 | +/- 1.9E-04 |
| Sband delay (usec) | -1.22176955412E+03 | | Apriori clock (usec) | | -3.3698444E+01 | | Resid sbdelay (usec) | | 4.46323E-01 | +/- 1.5E-03 |
| Phase delay (usec) | -1.22221588119E+03 | | Apriori clockrate (us/s) | | -3.7599999E-07 | | Resid phdelay (usec) | | -4.07170E-06 | +/- 6.6E-07 |
| Delay rate (us/s) | 3.86248691889E-01 | | Apriori rate (us/s) | | 3.86254272619E-01 | | Resid rate (us/s) | | -5.58073E-06 | +/- 2.7E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 1.19927913740E-05 | | Resid phase (deg) | | -126.3 | +/- 20.4 |

| | RMS | Theor. | Amplitude | 0.113 +/- 0.020 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | | |
|--------------|------|--------|------------------|-----------------|--|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 63.7 | 48.8 | Search (2048X32) | 0.100 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 | 1.000 | |
| amp/seg (%) | 86.2 | 85.2 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 28.7 | 28.8 | Inc. seg. avg. | 0.114 | Sample rate(MISamp/s): 128 | | dr window (ns/s) | -0.011 | 0.011 |
| amp/frq (%) | 39.3 | 50.3 | Inc. frq. avg. | 0.111 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) | 0.00 | 0.00 |

b: az 104.8 el 69.8 pa -57.1 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2850.211 1361.938 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/bn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bn.W.67.18UHQS

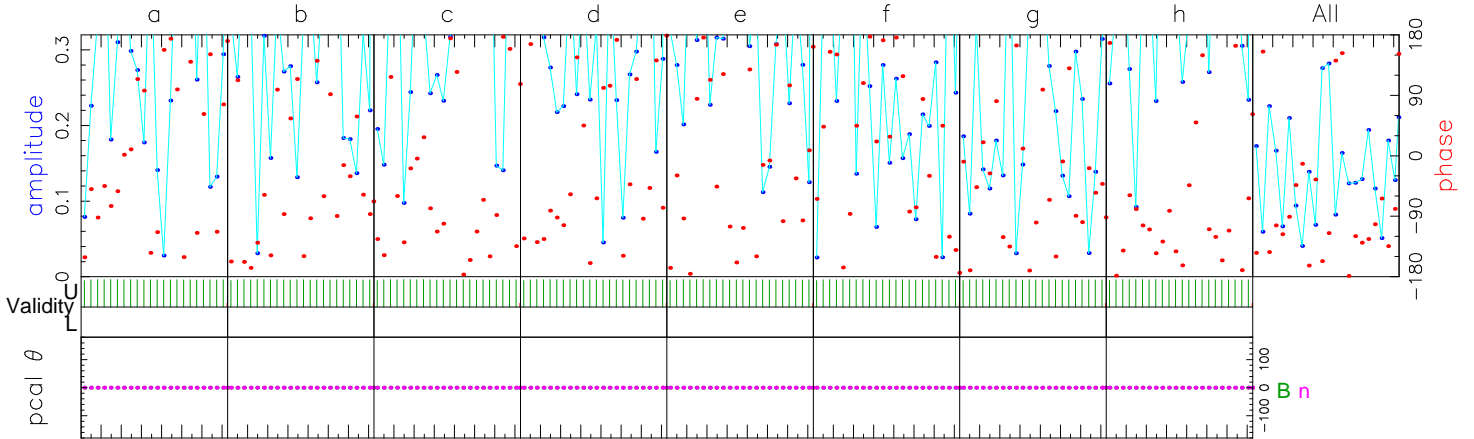


Fringe quality 0

SNR 5.9
Int time 415.115
Amp 0.107
Phase -129.7
PFD 5.2e-01
Delays (us)
SBD 0.364621
MBD 0.004670
Fringe rate (Hz)
-0.005802
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

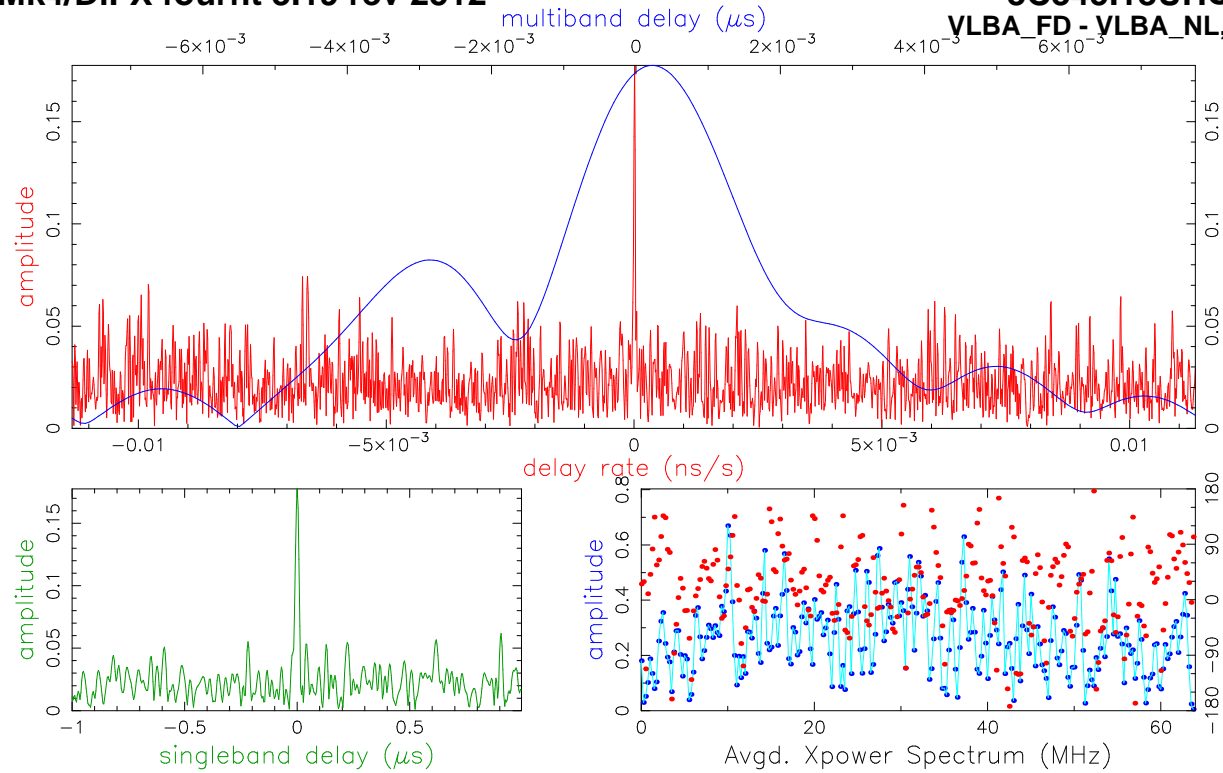
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143541
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--|--------------------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -1.29219050548E+04 | | | | | | | | 4.66985E-03 | +/- 1.8E-04 |
| Sband delay (usec) | -1.29219044782E+04 | | | | | | | | 3.64621E-01 | +/- 1.5E-03 |
| Phase delay (usec) | -1.29222691039E+04 | | | | | | | | -4.18186E-06 | +/- 6.2E-07 |
| Delay rate (us/s) | -6.89853072766E-01 | | | | | | | | -6.73576E-08 | +/- 2.6E-09 |
| Total phase (deg) | | | -219.0 | | | | | | -129.7 | +/- 19.3 |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| 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) 54.5 46.3 Amplitude 0.107 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.8 80.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.2 27.3 Inc. seg. avg. 0.106 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 54.6 47.6 Inc. frq. avg. 0.102 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 304.4 el 23.7 pa 42.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) 5304.994 5627.834 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/Bn..18UHQ5 Output file: /Exps/c201b/v1/1234/No0057/Bn.W.71.18UHQ5

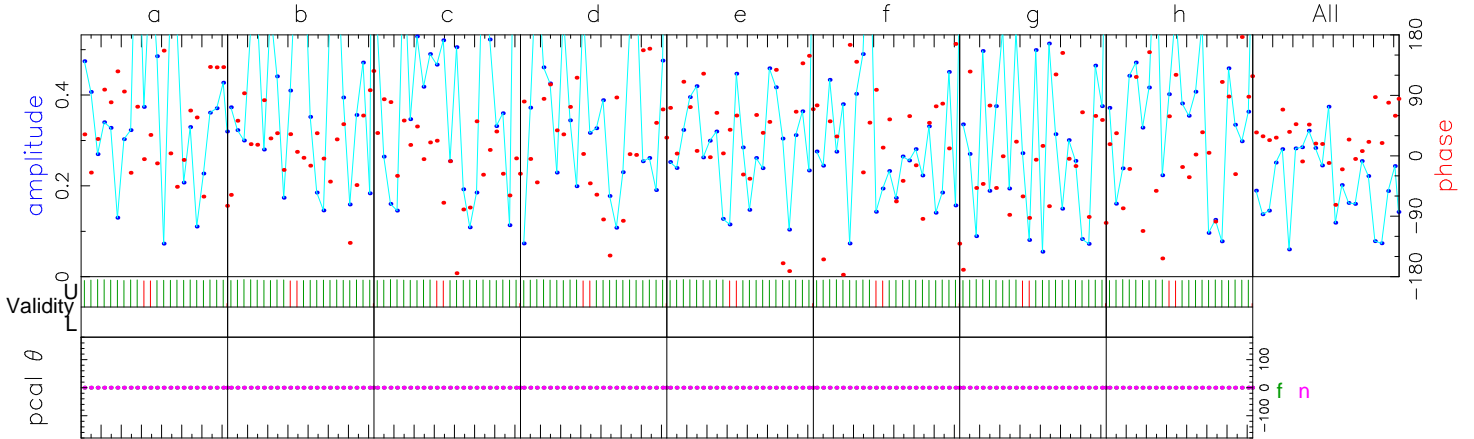


Fringe quality 9

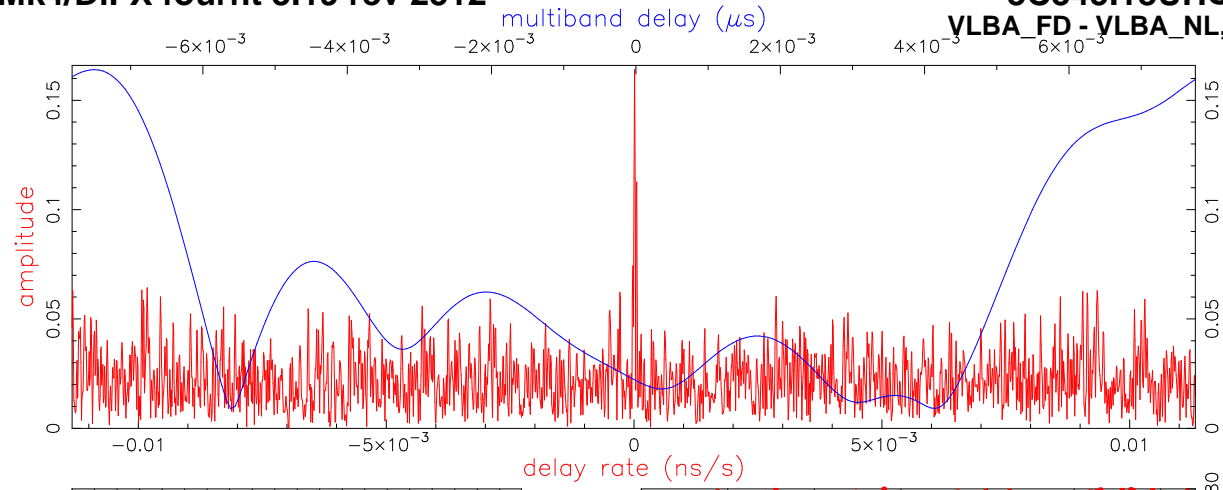
SNR 9.8
Int time 408.274
Amp 0.178
Phase 24.5
PFD 4.3e-14
Delays (us)
SBD -0.000031
MBD 0.000225
Fringe rate (Hz) 0.000784
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143553
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

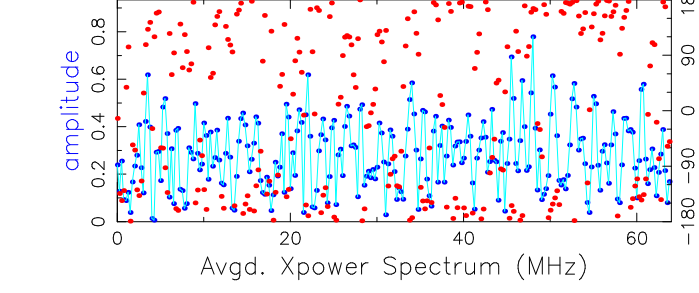
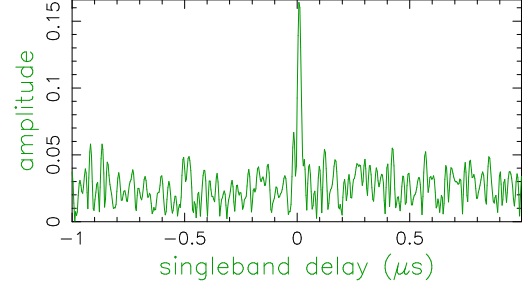
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



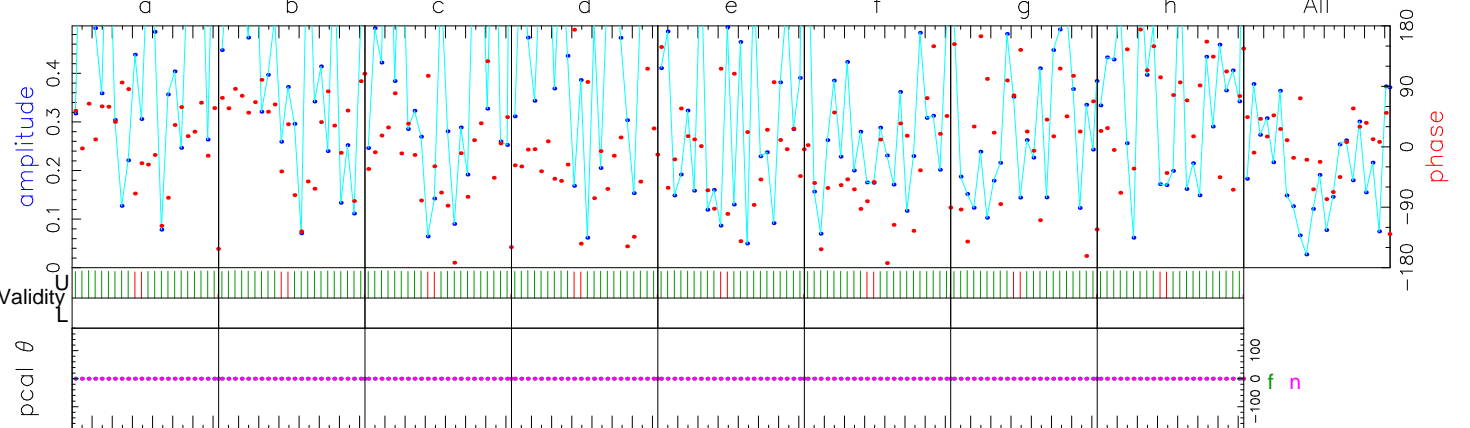
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--|--------------------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| fn | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec)(sbd) | -4.28443889367E+02 | | | | | | | | 2.24660E-04 | +/- 1.1E-04 |
| Sband delay (usec) | -4.28444144777E+02 | | | | | | | | -3.07500E-05 | +/- 8.8E-04 |
| Phase delay (usec) | -4.28444113236E+02 | | | | | | | | 7.91469E-07 | +/- 3.8E-07 |
| Delay rate (us/s) | 2.12894003586E-01 | | | | | | | | 9.10284E-09 | +/- 1.6E-09 |
| Total phase (deg) | | | -329.1 | | | | | | 24.5 | +/- 11.7 |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| ph/seg (deg) | 34.9 | 28.0 | | | | | | | | |
| amp/seg (%) | 49.0 | 48.9 | | | | | | | | |
| ph/frq (deg) | 24.5 | 16.5 | | | | | | | | |
| amp/frq (%) | 41.8 | 28.8 | | | | | | | | |
| Search (2048X32) | | | | | | | | | | |
| Interp. | | | | | | | | | | |
| Inc. seg. avg. | | | | | | | | | | |
| Inc. frq. avg. | | | | | | | | | | |
| 0.178 +/- 0.018 | | | | | | | | | | |
| 0.173 | | | | | | | | | | |
| 0.000 | | | | | | | | | | |
| 0.185 | | | | | | | | | | |
| 0.181 | | | | | | | | | | |
| PCal mode: MANUAL, MANUAL | | | | | | | | | | |
| PCal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| SampCntNorm: enabled | | | | | | | | | | |
| nlags: 256 | | | | | | | | | | |
| t_cohere infinite | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | |



Fringe quality 9
SNR 9.2
Int time 408.273
Amp 0.166
Phase 13.7
PFD 1.9e-11
Delays (us)
SBD 0.009234
MBD -0.007478
Fringe rate (Hz) 0.001007
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143557
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

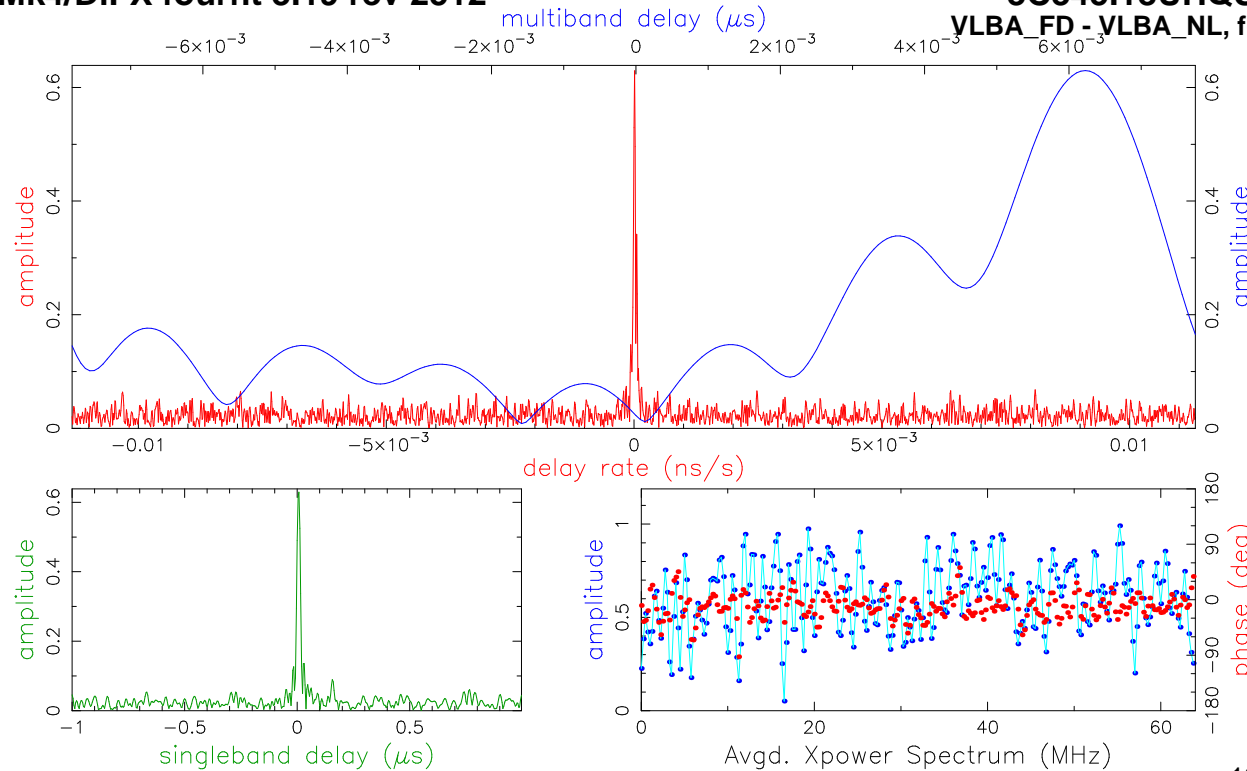


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--|--------------------|----------|----------|----------|--------------------|----------|----------|----------|--------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -4.28435966961E+02 | | | | -4.28444114027E+02 | | | | | |
| Sband delay (usec) | -4.28434880277E+02 | | | | -2.8390385E+01 | | | | | |
| Phase delay (usec) | -4.28444113585E+02 | | | | -2.2499998E-07 | | | | | |
| Delay rate (us/s) | 2.12894006172E-01 | | | | 2.12893994483E-01 | | | | | |
| Total phase (deg) | | | -339.9 | | -9.16151493967E-06 | | | | 13.7 | +/- 12.5 |
| Apriori delay (usec) | | | | | | | | | -7.47793E-03 | +/- 1.2E-04 |
| Apriori clock (usec) | | | | | | | | | 9.23375E-03 | +/- 9.4E-04 |
| Apriori clockrate (us/s) | | | | | | | | | 4.42322E-07 | +/- 4.0E-07 |
| Apriori rate (us/s) | | | | | | | | | 1.16898E-08 | +/- 1.7E-09 |
| 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) 43.1 30.0 Search (2048X32) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 64.8 52.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 53.7 17.7 Inc. seg. avg. 0.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 60.5 30.8 Inc. frq. avg. 0.199 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 39.2 el 77.7 pa -133.6 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1608.131 -1640.211 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/fn...18UHQS Output file: /Exps/c201b/v1/1234/No0057/fn.W.127.18UHQS

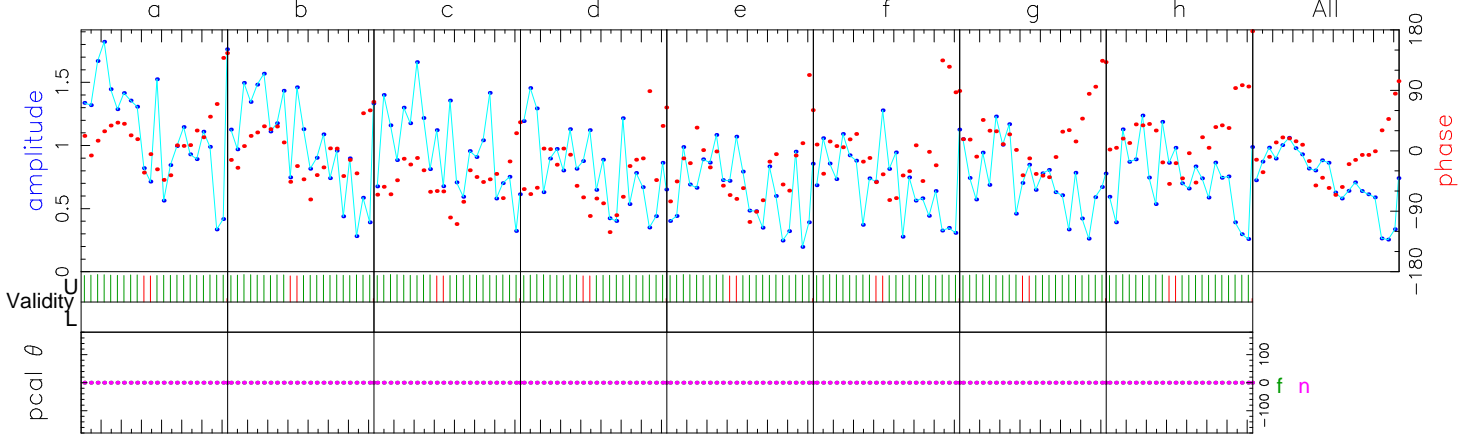


Fringe quality 5

SNR 35.3
Int time 408.274
Amp 0.639
Phase -10.0
PFD 0.0e+00
Delays (us)
SBD 0.006290
MBD 0.006197
Fringe rate (Hz) 0.000494
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

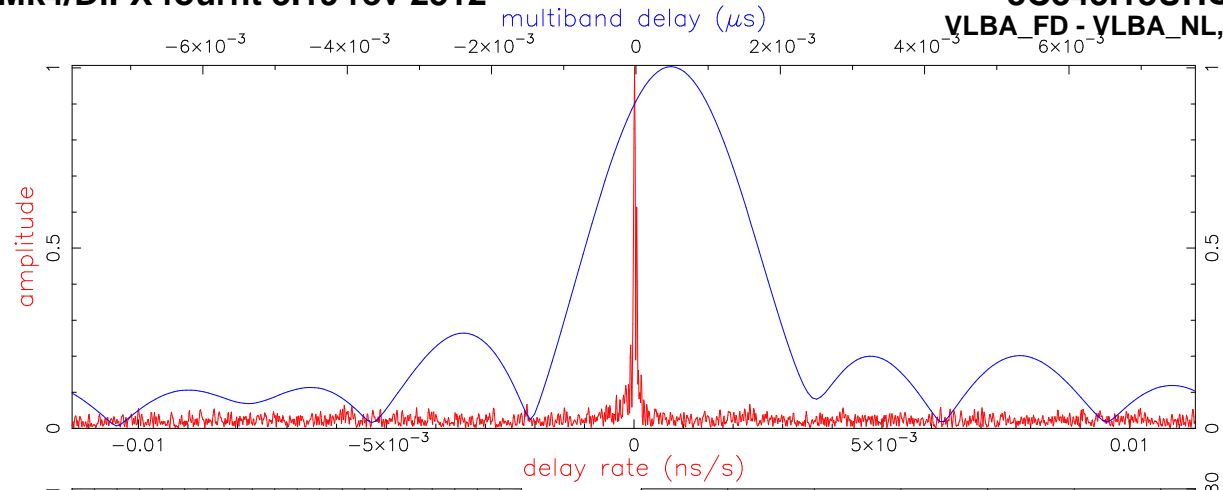
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143546
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--|--------------------|----------|----------|----------|--------------------|----------|----------|----------|--------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| f:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -4.28437916555E+02 | | | | -4.28444114027E+02 | | | | 6.19747E-03 | +/- 3.1E-05 |
| Sband delay (usec) | -4.28437823777E+02 | | | | -2.8390385E+01 | | | | 6.29025E-03 | +/- 2.4E-04 |
| Phase delay (usec) | -4.28444114351E+02 | | | | -2.2499998E-07 | | | | -3.23516E-07 | +/- 1.0E-07 |
| Delay rate (us/s) | 2.12894000218E-01 | | | | 2.12893994483E-01 | | | | 5.73577E-09 | +/- 4.3E-10 |
| Total phase (deg) | | | -3.7 | | -9.16151493967E-06 | | | | -10.0 | +/- 3.2 |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MISamp/s): 128 | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | -1.000 | 1.000 |
| mb window (us) | | | | | | | | | -0.008 | 0.008 |
| dr window (ns/s) | | | | | | | | | -0.011 | 0.011 |
| ion window (TEC) | | | | | | | | | 0.00 | 0.00 |

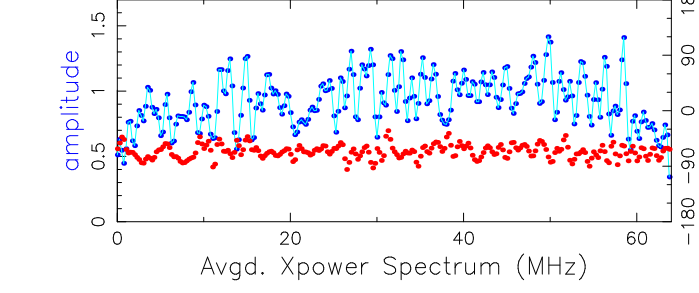
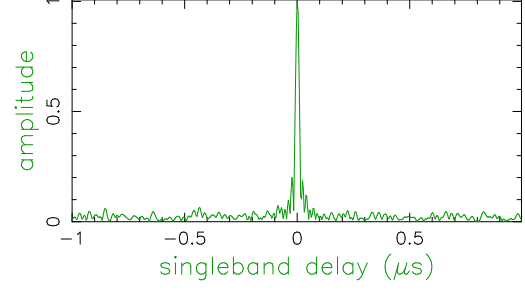
ph/seg (deg) 36.3 7.8 Search (2048X32) 0.595 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 38.3 13.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 27.6 4.6 Inc. seg. avg. 0.724 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 26.9 8.0 Inc. frq. avg. 0.689 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 39.2 el 77.7 pa -133.6 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1608.131 -1640.211 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/fn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fn.W.83.18UHQS



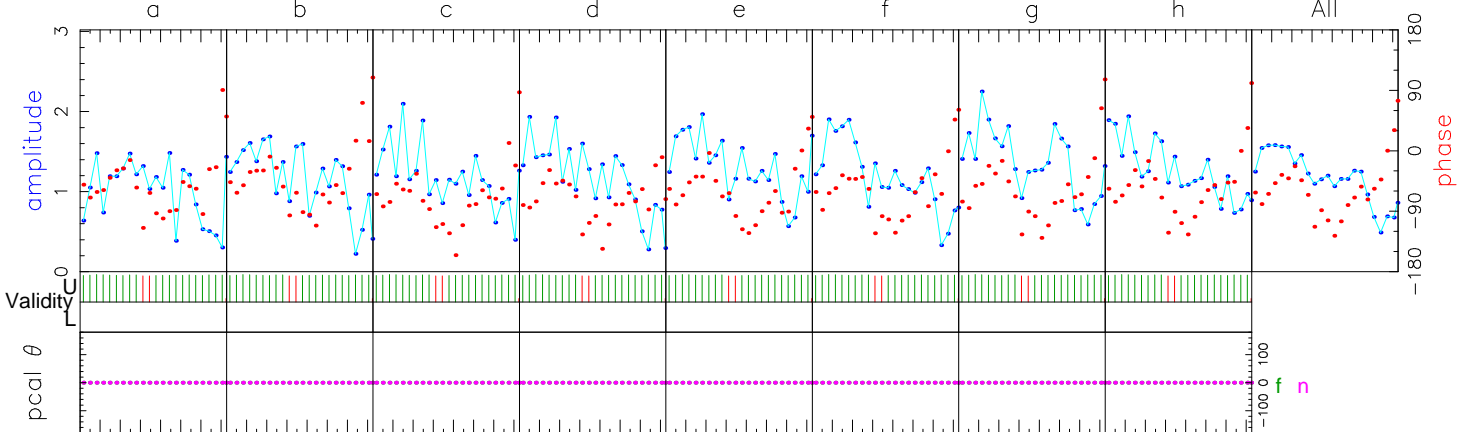
Fringe quality 6

SNR 55.6
Int time 408.273
Amp 1.007
Phase -63.2
PFD 0.0e+00
Delays (us)
SBD 0.000750
MBD 0.000502
Fringe rate (Hz) 0.000806
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143550
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

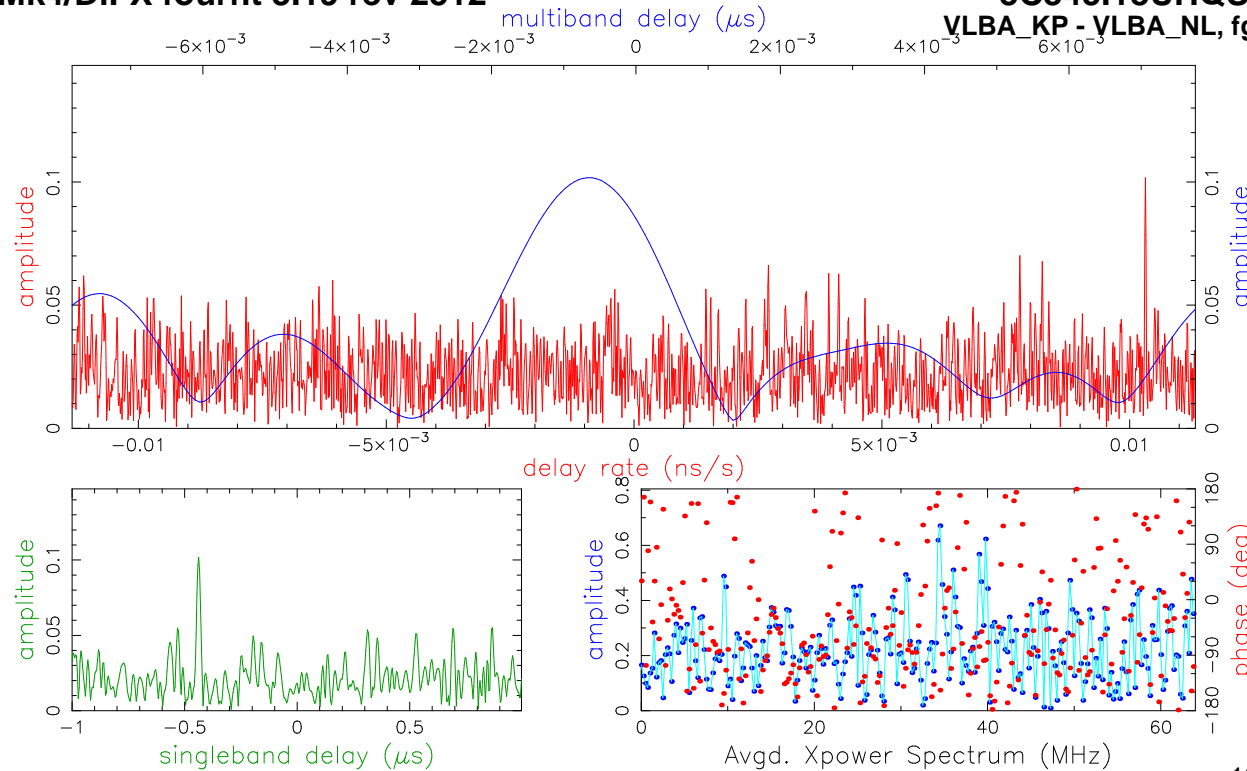


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -58.2 | -49.7 | -74.8 | -72.6 | -61.9 | -64.7 | -62.0 | -61.2 | Phase | -63.2 |
| | 0.8 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | Ampl. | 1.0 |
| | 257.6 | 256.9 | 256.7 | 257.2 | 257.3 | 257.4 | 257.3 | 257.3 | Sbd box | 257.2 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| f:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| f:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -4.28443611961E+02 | | Apriori delay (usec) | | -4.28444114027E+02 | | Resid mbdelay (usec) | | 5.02066E-04 | +/- 2.0E-05 |
| Sband delay (usec) | -4.28443363777E+02 | | Apriori clock (usec) | | -2.8390385E+01 | | Resid sbdelay (usec) | | 7.50250E-04 | +/- 1.5E-04 |
| Phase delay (usec) | -4.28444116066E+02 | | Apriori clockrate (us/s) | | -2.2499998E-07 | | Resid phdelay (usec) | | -2.03839E-06 | +/- 6.6E-08 |
| Delay rate (us/s) | 2.12894003837E-01 | | Apriori rate (us/s) | | 2.12893994483E-01 | | Resid rate (us/s) | | 9.35438E-09 | +/- 2.7E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -9.16151493967E-06 | | Resid phase (deg) | | -63.2 | +/- 2.1 |

ph/seg (deg) 37.1 4.9 Search (2048X32) 0.998 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.5 8.6 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 2.9 Inc. seg. avg. 1.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 7.2 5.1 Inc. frq. avg. 1.010 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 39.2 el 77.7 pa -133.6 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1608.131 -1640.211 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/fn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fn.W.96.18UHQS

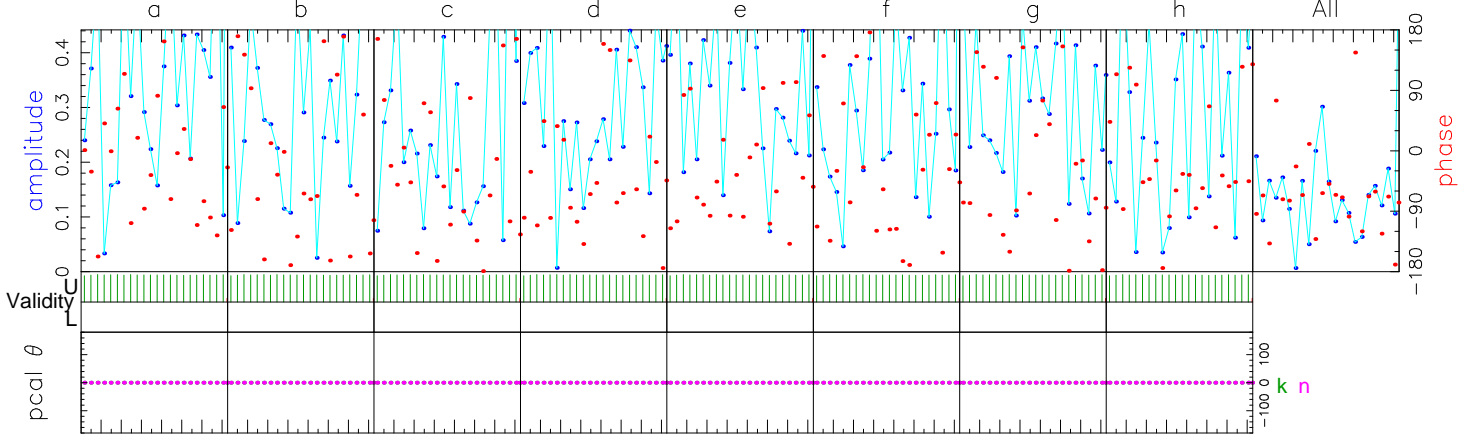


Fringe quality 0

SNR 5.7
Int time 412.690
Amp 0.147
Phase -82.8
PFD 9.8e-01
Delays (us)
SBD -0.438039
MBD -0.000676
Fringe rate (Hz)
0.890593
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143553
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|----------|----------|----------|--------------------|----------|----------|----------------------|--------------------------|
| | -64.2 | -138.5 | -66.9 | -84.8 | -54.2 | -120.7 | -130.8 | -58.4 | Phase | -82.8 |
| | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Ampl. | 0.2 |
| | 440.7 | 390.2 | 143.4 | 146.7 | 284.9 | 379.8 | 392.3 | 81.0 | Sbd box | 144.9 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| k:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| k:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -7.68133666049E+02 | | | | | -7.67695490366E+02 | | | Resid mbdelay (usec) | -6.75684E-04 +/- 1.9E-04 |
| Sband delay (usec) | -7.68133529616E+02 | | | | | -3.2634834E+01 | | | Resid sbdelay (usec) | -4.38039E-01 +/- 1.5E-03 |
| Phase delay (usec) | -7.67695493036E+02 | | | | | -3.2859999E-07 | | | Resid phdelay (usec) | -2.66989E-06 +/- 6.5E-07 |
| Delay rate (us/s) | 3.42815960467E-01 | | | | | 3.42805621560E-01 | | | Resid rate (us/s) | 1.03389E-05 +/- 2.7E-09 |
| Total phase (deg) | | | -277.2 | | | -5.95765921403E-06 | | | Resid phase (deg) | -82.8 +/- 20.3 |

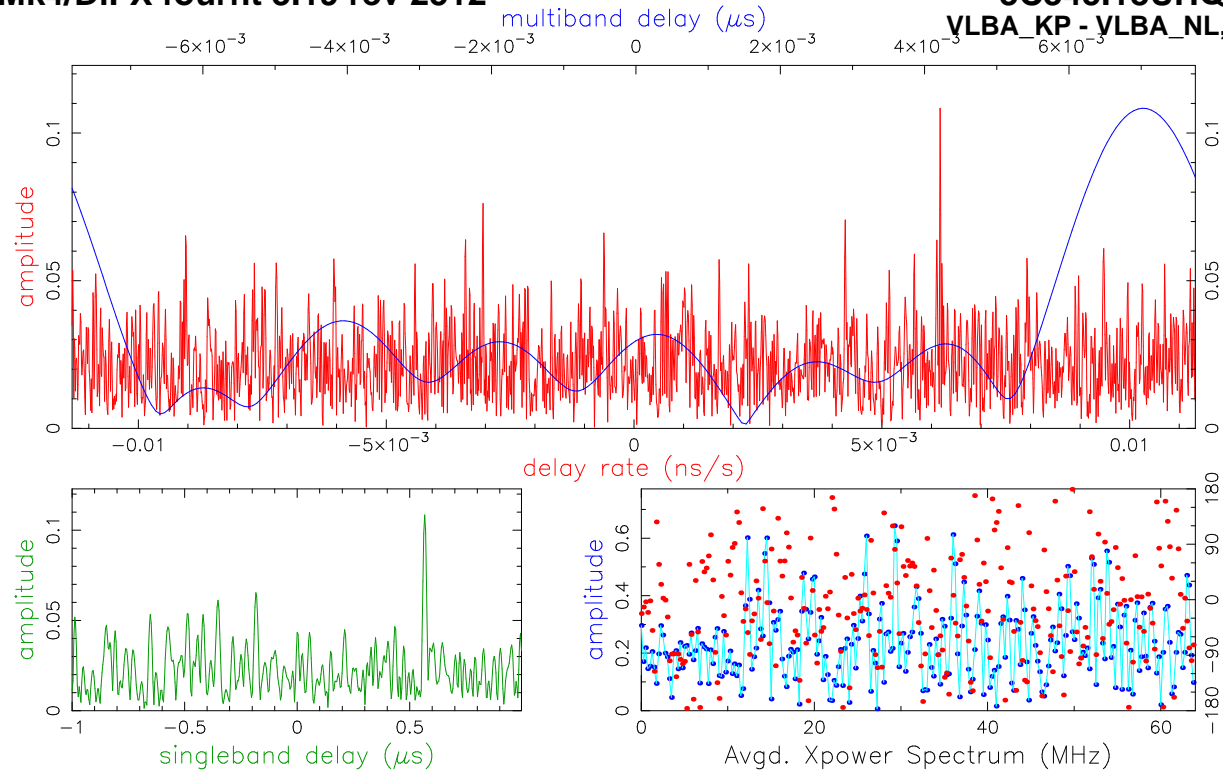
ph/seg (deg) 57.8 48.6
amp/seg (%) 78.9 84.8
ph/frq (deg) 38.4 28.6
amp/frq (%) 32.7 50.0

RMS Theor. Amplitude 0.147 +/- 0.026
Search (2048X32) 0.099
Interp. 0.000
Inc. seg. avg. 0.146
Inc. frq. avg. 0.151

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MSamp/s): 128
Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite

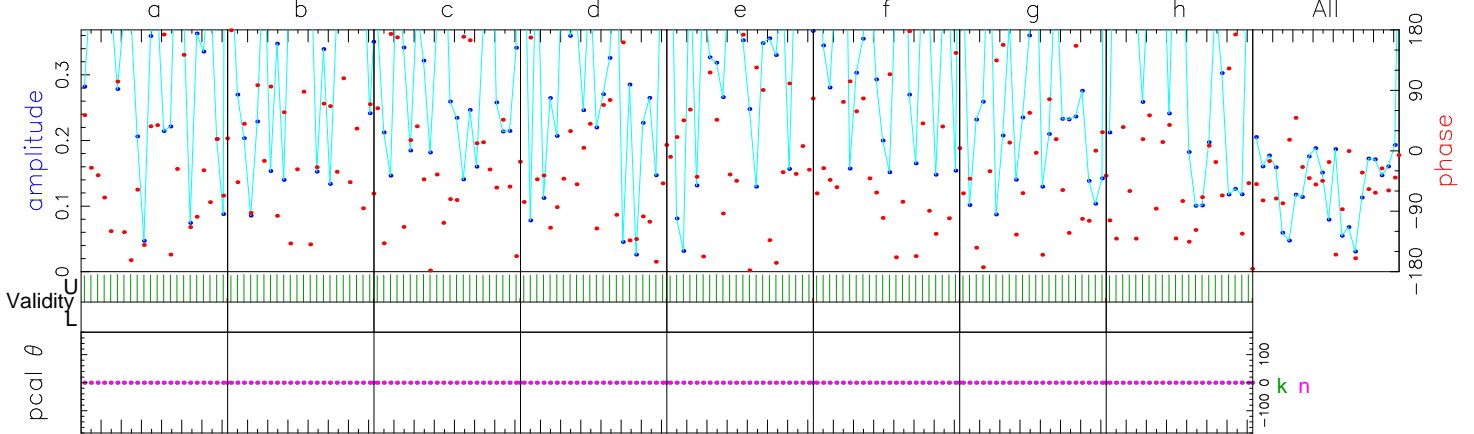
sb window (us) -1.000 1.000
mb window (us) -0.008 0.008
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

k: az 56.4 el 73.7 pa -114.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2568.658 -1282.180 simultaneous interpolator



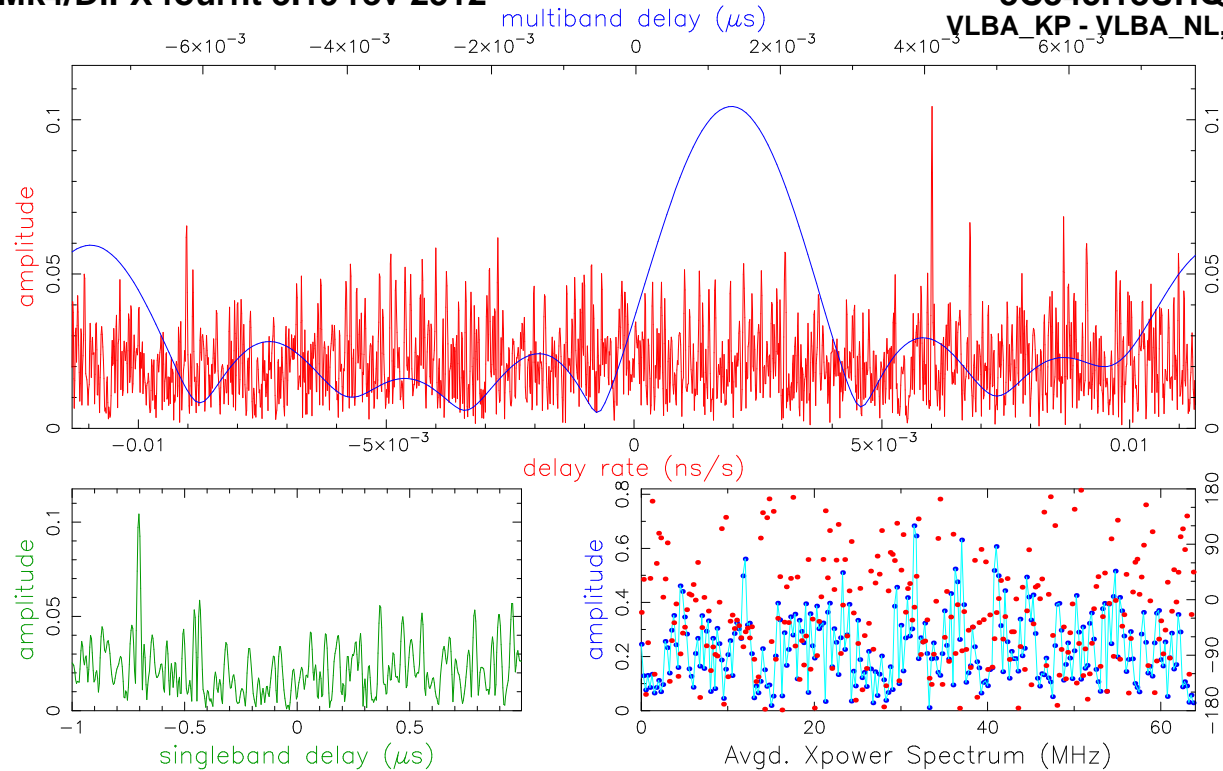
Fringe quality 0
SNR 6.0
Int time 412.690
Amp 0.123
Phase -46.3
PFD 3.6e-01
Delays (us)
SBD 0.566469
MBD 0.007029
Fringe rate (Hz) 0.533260
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build 2020:198:173216
2020:199:143557
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



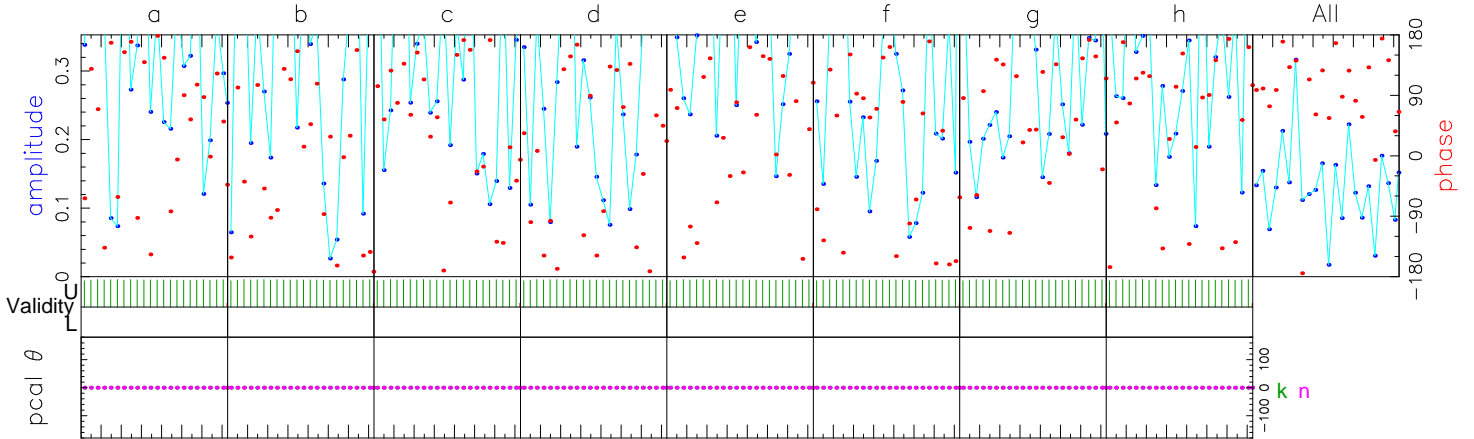
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -55.6 | -24.1 | -57.1 | -55.1 | -16.6 | -41.7 | -36.2 | -59.8 | Phase | -46.3 |
| | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | Ampl. | 0.1 |
| | 29.1 | 35.8 | 184.2 | 307.8 | 211.8 | 468.2 | 354.5 | 489.2 | Sbd box | 402.0 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| k:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| k:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -7.67125961156E+02 | | Apriori delay (usec) | | -7.67695490366E+02 | | Resid mbdelay (usec) | | 7.02921E-03 | +/- 1.8E-04 |
| Sband delay (usec) | -7.67129021116E+02 | | Apriori clock (usec) | | -3.2634834E+01 | | Resid sbdelay (usec) | | 5.66469E-01 | +/- 1.4E-03 |
| Phase delay (usec) | -7.67695491858E+02 | | Apriori clockrate (us/s) | | -3.2859999E-07 | | Resid phdelay (usec) | | -1.49272E-06 | +/- 6.1E-07 |
| Delay rate (us/s) | 3.42811812180E-01 | | Apriori rate (us/s) | | 3.42805621560E-01 | | Resid rate (us/s) | | 6.19062E-06 | +/- 2.5E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -5.95765921403E-06 | | Resid phase (deg) | | -46.3 | +/- 19.0 |

ph/seg (deg) 46.3 45.6 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 62.2 79.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 18.1 26.9 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 27.9 47.0 Inc. frq. avg. 0.114 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 56.4 el 73.7 pa -114.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2568.658 -1282.180 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/kn..18UHQs Output file: /Exps/c201b/v1/1234/No0057/kn.W.128.18UHQs



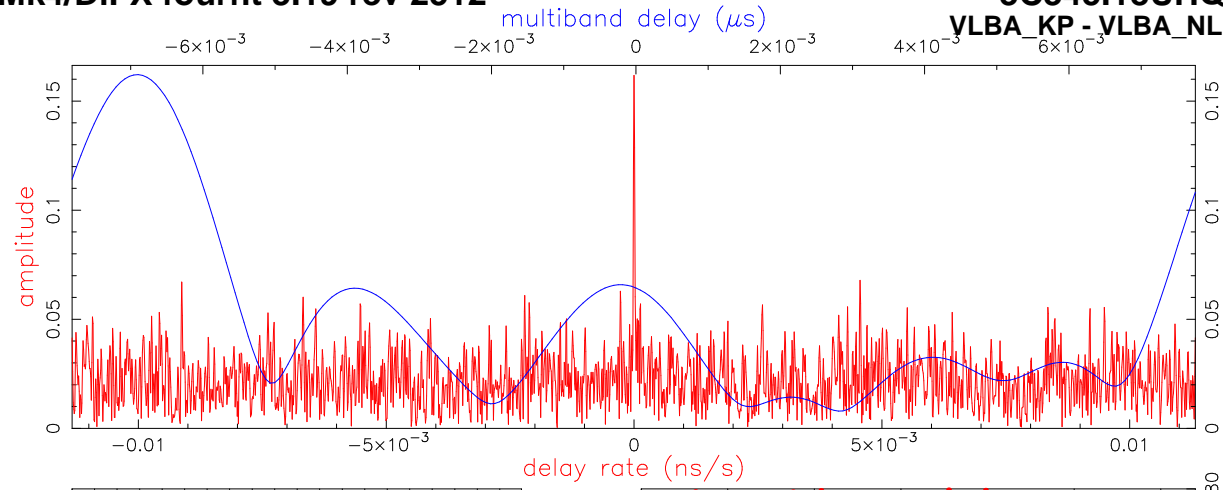
Fringe quality 0
SNR 5.8
Int time 412.690
Amp 0.118
Phase 123.5
PFD 8.1e-01
Delays (us)
SBD -0.703593
MBD 0.001296
Fringe rate (Hz) 0.519039
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201b
Yr:day 16383
2020:198:173216
2020:199:143602
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|------------------|-----------------|--|------------------------------|----------|------------------|--------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -7.68397319685E+02 | | | | -7.67695490366E+02 | | | | 1.29568E-03 | +/- 1.9E-04 |
| Sband delay (usec) | -7.68399083366E+02 | | | | -3.2634834E+01 | | | | -7.03593E-01 | +/- 1.5E-03 |
| Phase delay (usec) | -7.67695486384E+02 | | | | -3.2859999E-07 | | | | 3.98178E-06 | +/- 6.4E-07 |
| Delay rate (us/s) | 3.42811647094E-01 | | | | 3.42805621560E-01 | | | | 6.02553E-06 | +/- 2.6E-09 |
| Total phase (deg) | | | -71.0 | | -5.95765921403E-06 | | | | 123.5 | +/- 19.8 |
| | RMS | Theor. | Amplitude | 0.118 +/- 0.020 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | | | |
| ph/seg (deg) | 50.5 | 47.4 | Search (2048X32) | 0.101 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) | | -1.000 | 1.000 | |
| amp/seg (%) | 66.4 | 82.7 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 26.8 | 27.9 | Inc. seg. avg. | 0.112 | Sample rate(MISamp/s): 128 | dr window (ns/s) | | -0.011 | 0.011 | |
| amp/frq (%) | 31.6 | 48.8 | Inc. frq. avg. | 0.114 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | ion window (TEC) | 0.00 | 0.00 |

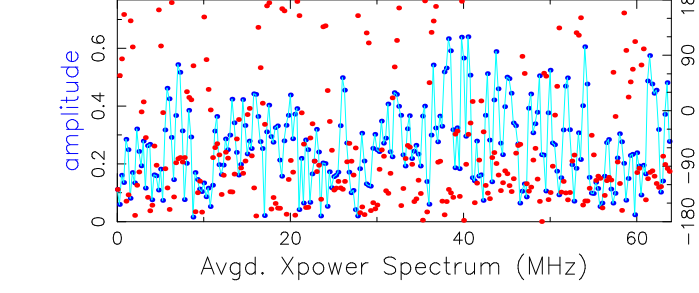
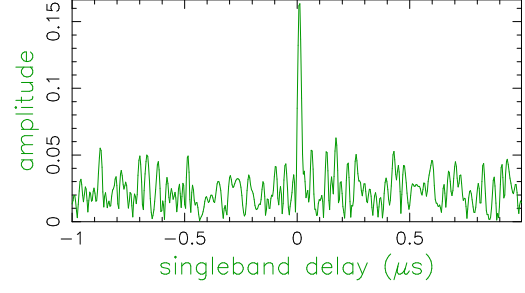
k: az 56.4 el 73.7 pa -114.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2568.658 -1282.180 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/kn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kn.W.147.18UHQS



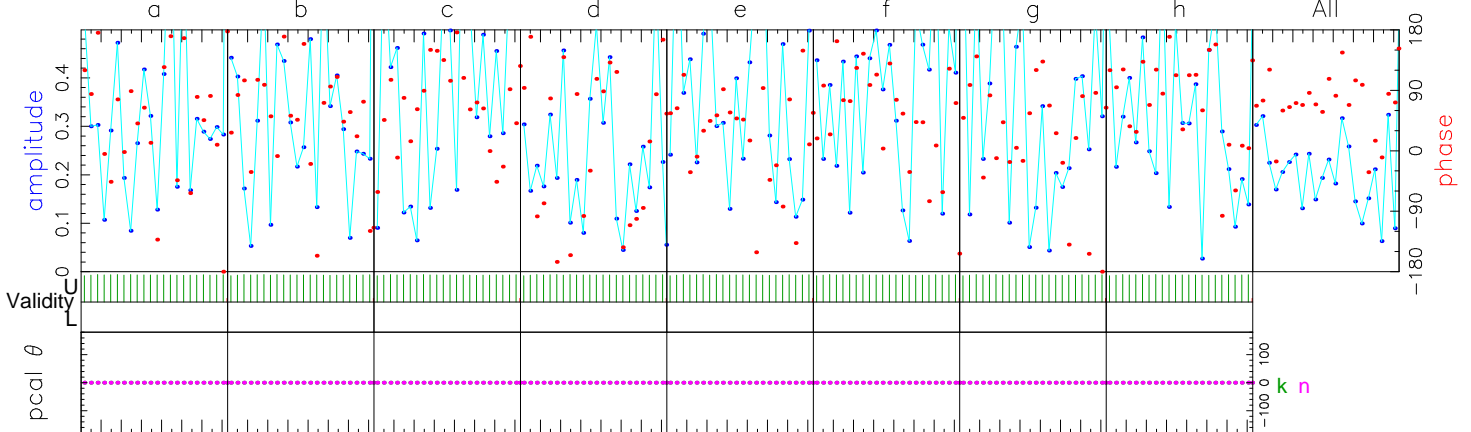
Fringe quality 9

SNR 9.2
Int time 412.690
Amp 0.166
Phase 75.8
PFD 9.6e-12
Delays (us)
SBD 0.009980
MBD -0.006840
Fringe rate (Hz)
-0.000264
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143548
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

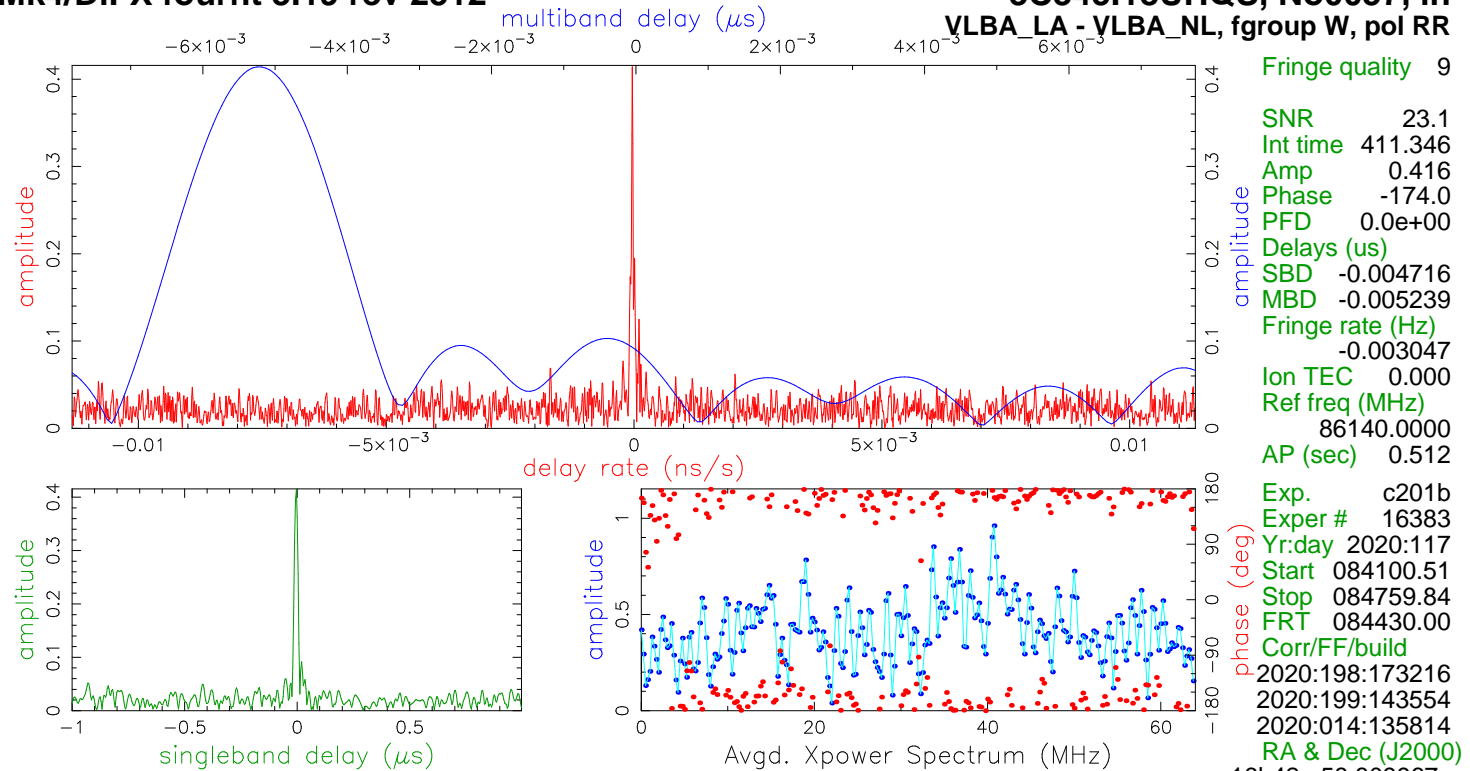


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

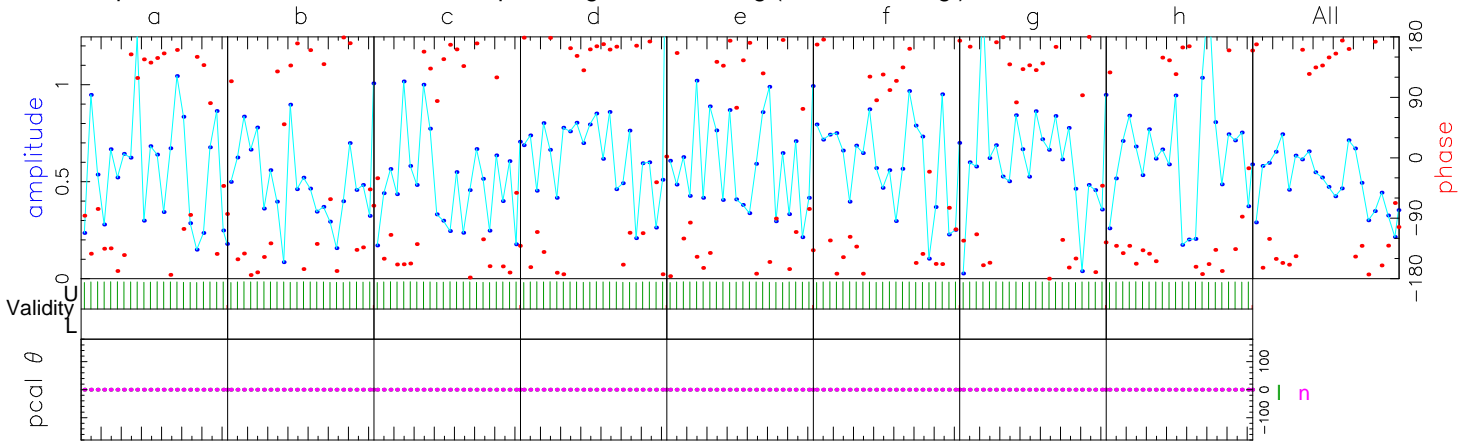


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|-----------------------------|----------|-------------------------------|----------|--------------------|----------|----------|----------|--------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | -7.67686705741E+02 | | | | -7.67695490366E+02 | | | | -6.84037E-03 | +/- 1.2E-04 |
| Sband delay (usec) | -7.67685509866E+02 | | | | -3.2634834E+01 | | | | 9.98050E-03 | +/- 9.3E-04 |
| Phase delay (usec) | -7.67695487922E+02 | | | | -3.2859999E-07 | | | | 2.44334E-06 | +/- 4.0E-07 |
| Delay rate (us/s) | 3.42805618496E-01 | | | | 3.42805621560E-01 | | | | -3.06451E-09 | +/- 1.7E-09 |
| Total phase (deg) | | | -118.7 | | -5.95765921403E-06 | | | | 75.8 | +/- 12.4 |
| Apriori delay (usec) | | | | | 0.160 | | | | | |
| Apriori clock (usec) | | | | | 0.160 | | | | | |
| Apriori clockrate (us/s) | | | | | 0.000 | | | | | |
| Apriori rate (us/s) | | | | | 0.181 | | | | | |
| Apriori accel (us/s/s) | | | | | 0.167 | | | | | |
| 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 | | | | | | | |
| 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 | | | | | | | |
| nlags: | 256 | | t_cohere infinite | | | | | | | |

ph/seg (deg) 43.7 29.7 Search (2048X32) 0.166 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.9 51.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.4 17.5 Inc. seg. avg. 0.181 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.9 30.6 Inc. frq. avg. 0.167 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 56.4 el 73.7 pa -114.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2568.658 -1282.180 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/kn.18UHQS Output file: /Exps/c201b/v1/1234/No0057/kn.W.89.18UHQS



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

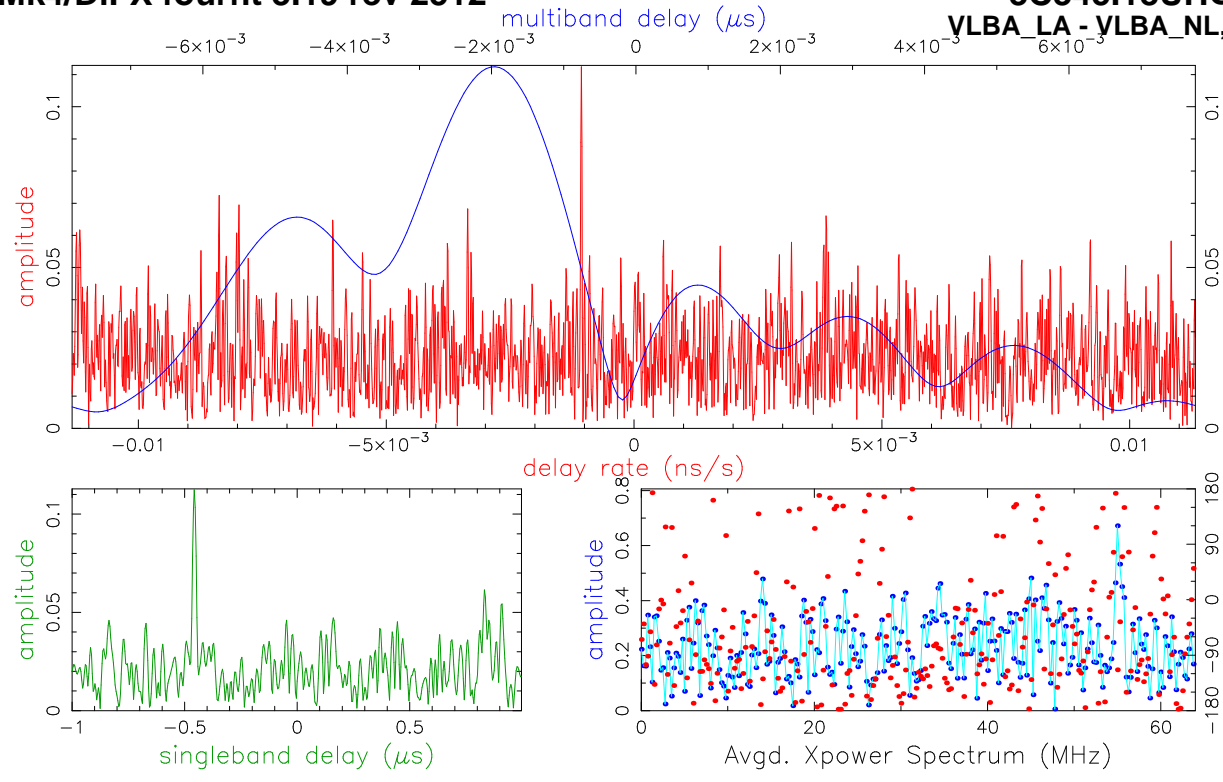


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|-----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| 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) | -3.01155248189E+02 | | | | | | | | | |
| Sband delay (usec) | -3.01154725209E+02 | | | | | | | | | |
| Phase delay (usec) | -3.01150014571E+02 | | | | | | | | | |
| Delay rate (us/s) | 2.42145844294E-01 | | | | | | | | | |
| Total phase (deg) | | | -91.8 | | | | | | | |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: | MANUAL | MANUAL | | | | | | | | |
| Pcal rate: | 0.000E+00 | 0.000E+00 | | | | | | | | |
| 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) 39.4 11.9 Search (2048X32) 0.406 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.3 20.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.8 7.0 Inc. seg. avg. 0.497 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 13.5 12.3 Inc. frq. avg. 0.414 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011
 l: az 64.0 el 79.5 pa -110.3 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1814.725 -819.151 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/ln..18UHQS Output file: /Exps/c201b/v1/1234/No0057/ln.W.117.18UHQS simultaneous interpolator

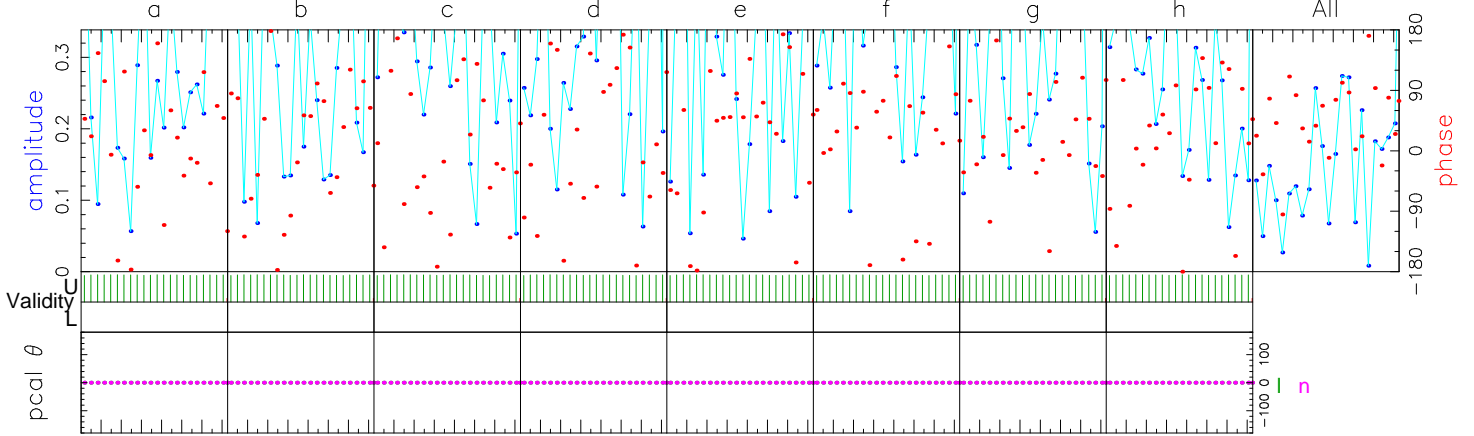
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, In VLBA_LA - VLBA_NL, fgroup W, pol LR



Fringe quality 0
 SNR 6.2
 Int time 411.346
 Amp 0.113
 Phase 55.2
 PFD 1.1e-01
 Delays (us)
 SBD -0.456932
 MBD -0.001963
 Fringe rate (Hz)
 -0.091894
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143601
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

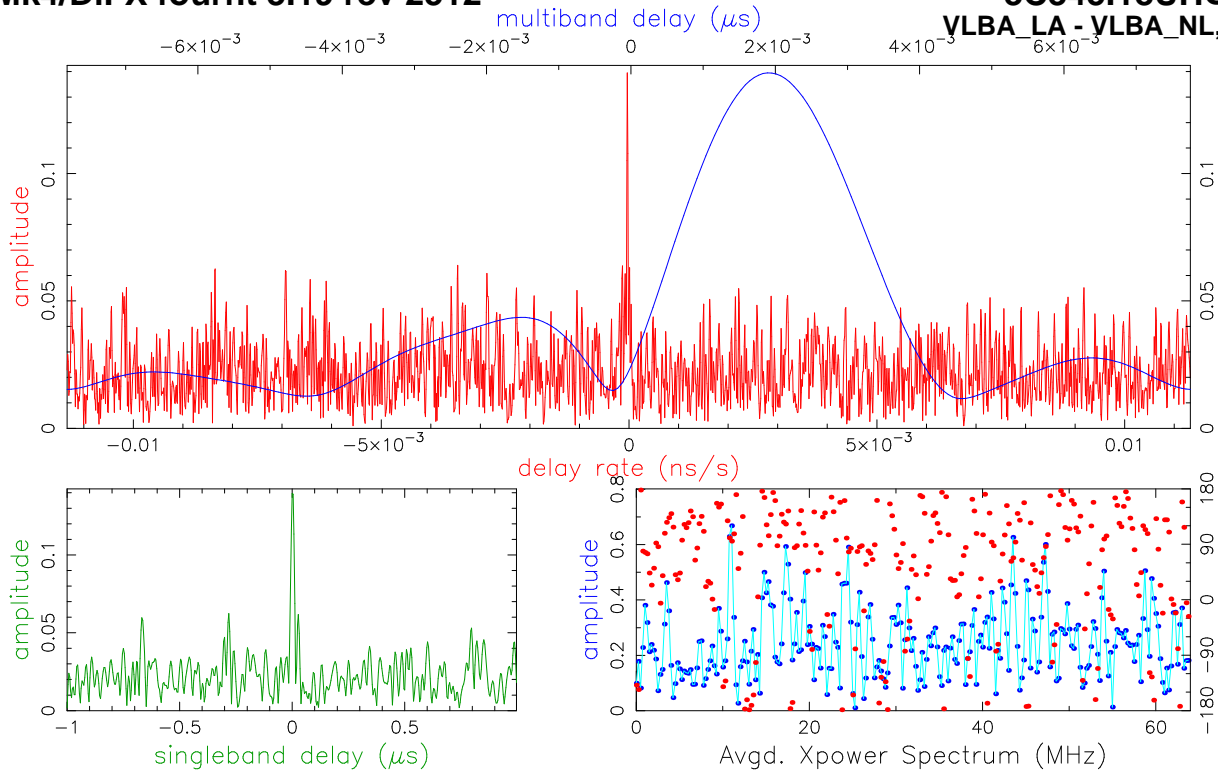


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--|--------------------|----------|----------|----------|----------|----------|----------|----------|------------|----------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| 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) | -3.01605097369E+02 | | | | | | | | | |
| Sband delay (usec) | -3.01606940459E+02 | | | | | | | | | |
| Phase delay (usec) | -3.01150007177E+02 | | | | | | | | | |
| Delay rate (us/s) | 2.42144812863E-01 | | | | | | | | | |
| Total phase (deg) | | | -222.6 | | | | | | | |
| 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) | | | | | | | | | 55.2 | +/- 18.4 |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Sample rate(MSamp/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) | | | | | | | | | | |

ph/seg (deg) 57.4 44.1 Search (2048X32) 0.113 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.5 76.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 72.4 26.0 Inc. seg. avg. 0.112 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.6 45.4 Inc. frq. avg. 0.112 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 64.0 el 79.5 pa -110.3 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1814.725 -819.151 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/in..18UHQS Output file: /Exps/c201b/v1/1234/No0057/in.W.144.18UHQS

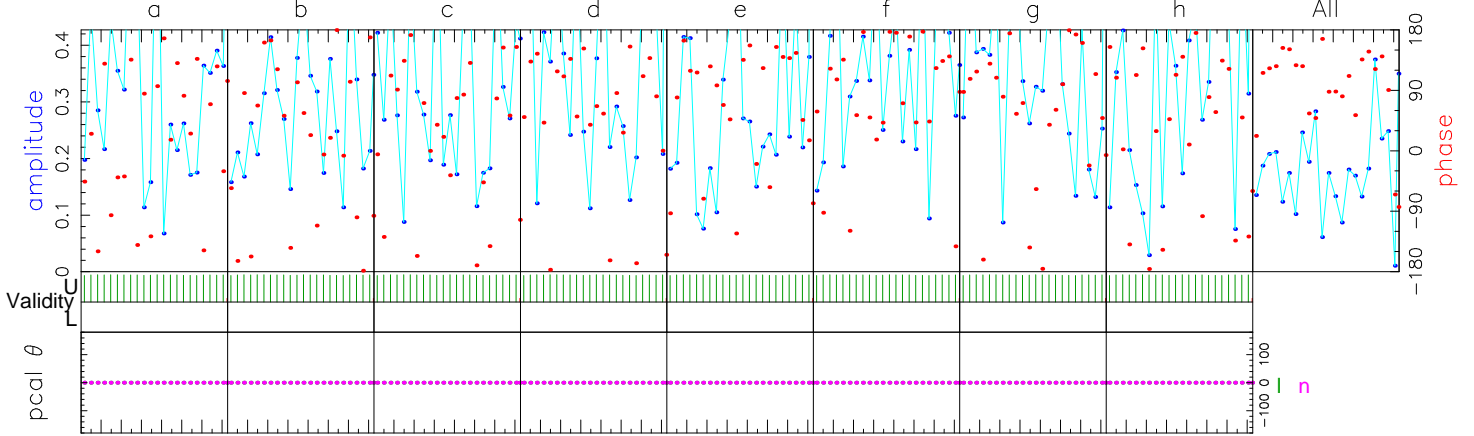
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, In VLBA_LA - VLBA_NL, fgroup W, pol RL



Fringe quality 9
 SNR 7.9
 Int time 411.347
 Amp 0.142
 Phase 108.7
 PFD 9.4e-07
 Delays (us)
 SBD 0.001884
 MBD 0.001942
 Fringe rate (Hz) -0.003199
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143605
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

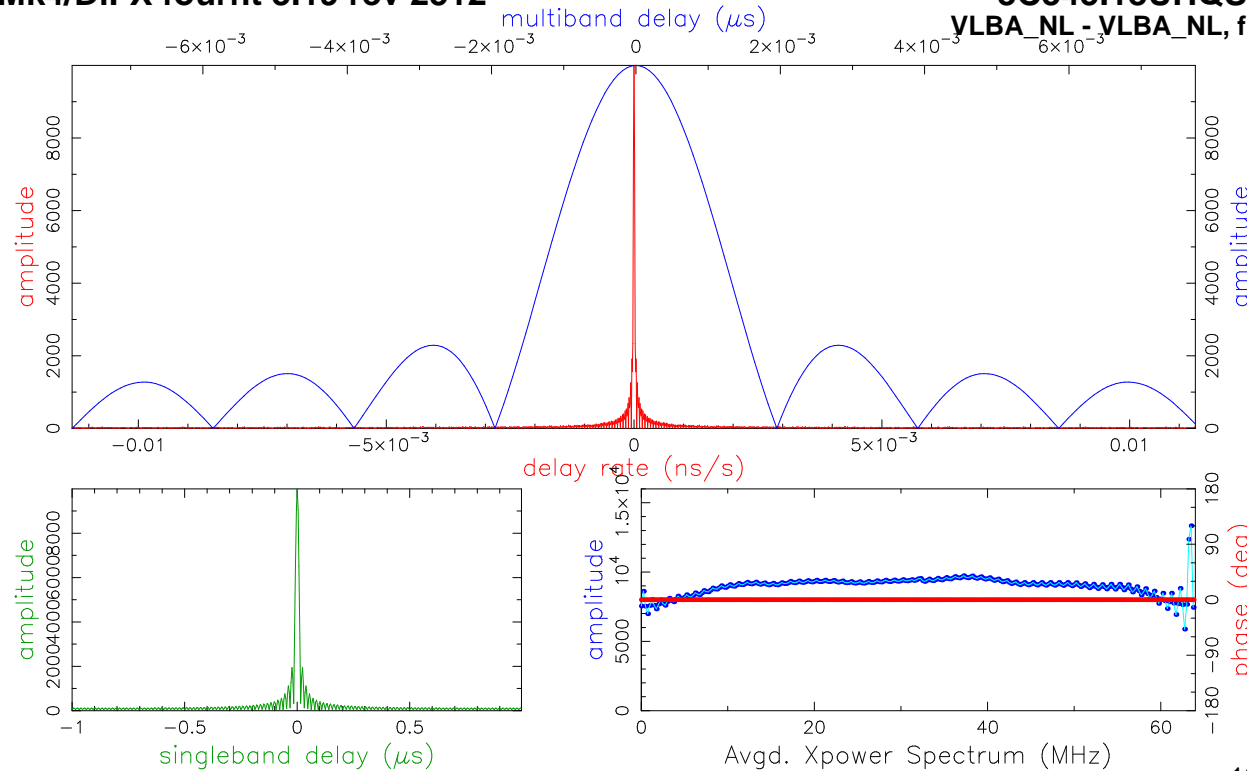


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| 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) | -3.0114806689E+02 | Apriori delay (usec) | -3.01150008959E+02 | Resid mbdelay (usec) | 1.94227E-03 | +/- | 1.4E-04 |
| Sband delay (usec) | -3.01148124709E+02 | Apriori clock (usec) | -3.5996647E+01 | Resid sbdelay (usec) | 1.88425E-03 | +/- | 1.1E-03 |
| Phase delay (usec) | -3.01150005453E+02 | Apriori clockrate (us/s) | -4.8500001E-07 | Resid phdelay (usec) | 3.50599E-06 | +/- | 4.7E-07 |
| Delay rate (us/s) | 2.42145842527E-01 | Apriori rate (us/s) | 2.42145879663E-01 | Resid rate (us/s) | -3.71362E-08 | +/- | 1.9E-09 |
| Total phase (deg) | -169.1 | Apriori accel (us/s/s) | -4.46465191760E-06 | Resid phase (deg) | 108.7 | +/- | 14.5 |

| | | | | | | | | | | |
|--------------|------|--------|------|------------------|-----------------|--|-----------------------|-------------------|--------|-------|
| ph/seg (deg) | 54.0 | Theor. | 34.8 | Amplitude | 0.142 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
| amp/seg (%) | 59.5 | | 60.7 | Search (2048X32) | 0.136 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 16.4 | | 20.5 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| amp/frq (%) | 42.5 | | 35.8 | Inc. seg. avg. | 0.149 | Sample rate(MSamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| | | | | Inc. frq. avg. | 0.135 | Data rate(Mb/s): 2048 | nlags: 256 | t_cohere infinite | | |

l: az 64.0 el 79.5 pa -110.3 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1814.725 -819.151 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/ln..18UHQS Output file: /Exps/c201b/v1/1234/No0057/ln.W.159.18UHQS

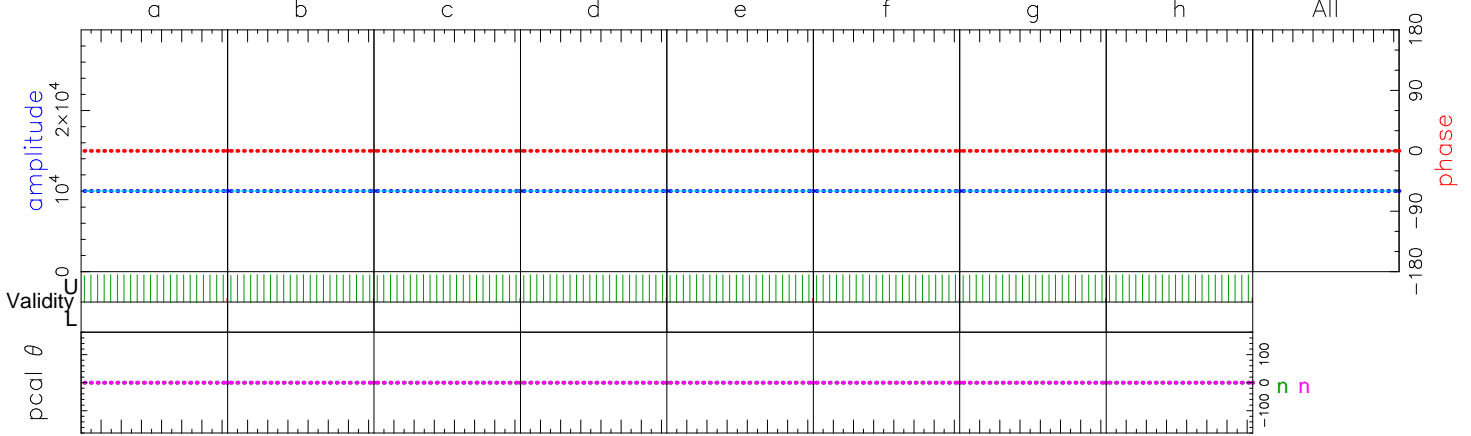


Fringe quality 9

SNR 557166.8
Int time 415.122
Amp 9999.996
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. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143603
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

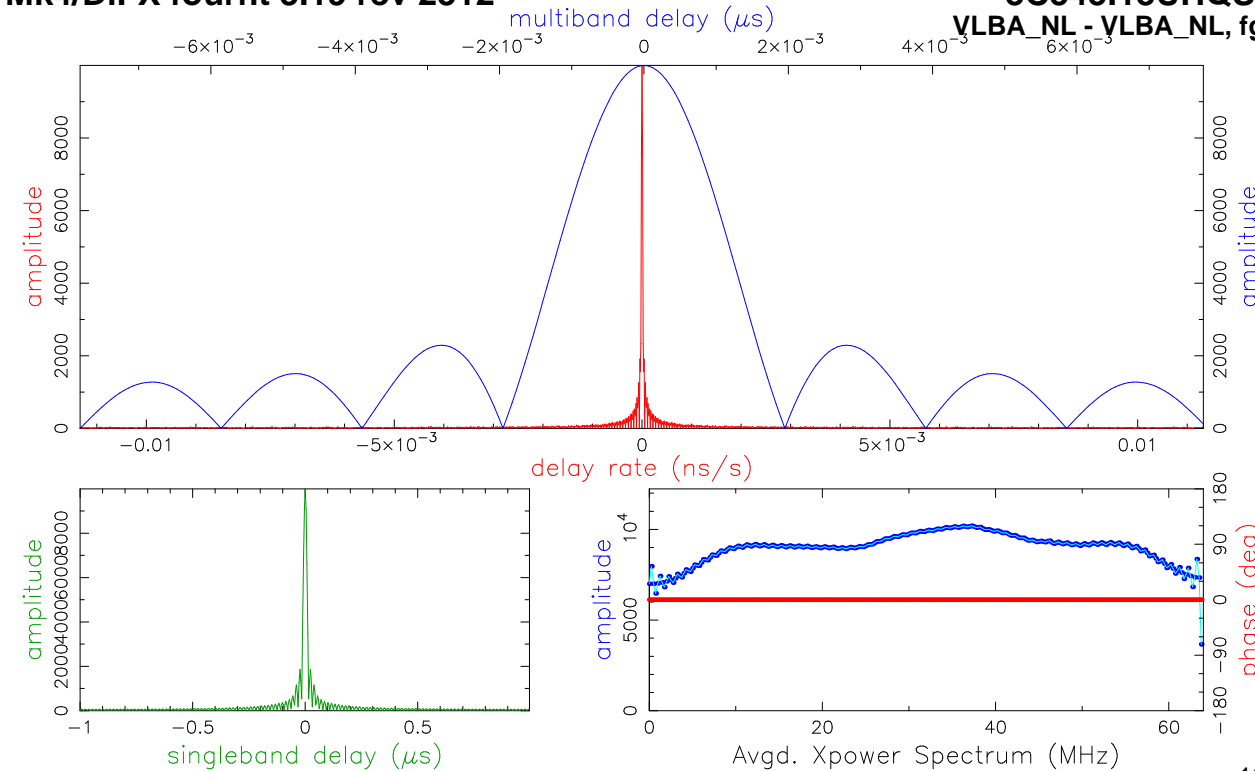
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| n:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | 0.000000000000E+00 | Apriori delay (usec) | 0.000000000000E+00 | Resid mbdelay (usec) | 0.000000E+00 | +/- | 1.9E-09 |
| Sband delay (usec) | 0.000000000000E+00 | Apriori clock (usec) | 0.0000000E+00 | Resid sbdelay (usec) | 0.000000E+00 | +/- | 1.5E-08 |
| Phase delay (usec) | 3.56459752726E-20 | Apriori clockrate (us/s) | 0.0000000E+00 | Resid phdelay (usec) | 3.56460E-20 | +/- | 6.6E-12 |
| Delay rate (us/s) | 0.000000000000E+00 | Apriori rate (us/s) | 0.000000000000E+00 | Resid rate (us/s) | 0.000000E+00 | +/- | 2.7E-14 |
| Total phase (deg) | 0.0 | Apriori accel (us/s/s) | 0.000000000000E+00 | Resid phase (deg) | 0.0 | +/- | 0.0 |

| | | | | | | | | | | | | | |
|--------------|--------------------------|-----|--------------------------|------------------|-------------|---------------------------|--------------------|------------------------|-----------------------------|----------------------|-------------------|------------------|--------------|
| ph/seg (deg) | 0.0 | RMS | 0.0 | Theor. | 0.0 | Amplitude | 9999.996 +/- 0.018 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | | |
| amp/seg (%) | 0.0 | 0.0 | 0.0 | Search (2048X32) | 9999.996 | Interp. | 0.000 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 1.000 | | |
| ph/frq (deg) | 0.0 | 0.0 | 0.0 | Inc. seg. avg. | 10000.000 | Inc. frq. avg. | 9999.996 | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 | |
| amp/frq (%) | 0.0 | 0.0 | 0.0 | Inc. frq. avg. | 9999.996 | Inc. frq. avg. | 9999.996 | Sample rate (MSamp/s): | 128 | nlags: 256 | t_cohere infinite | dr window (ns/s) | -0.011 0.011 |
| n: | az 222.0 el 87.3 pa 44.3 | n: | az 222.0 el 87.3 pa 44.3 | u,v (fr/asec) | 0.000 0.000 | simultaneous interpolator | | Data rate (Mb/s): | 2048 | ion window (TEC) | 0.00 0.00 | | |

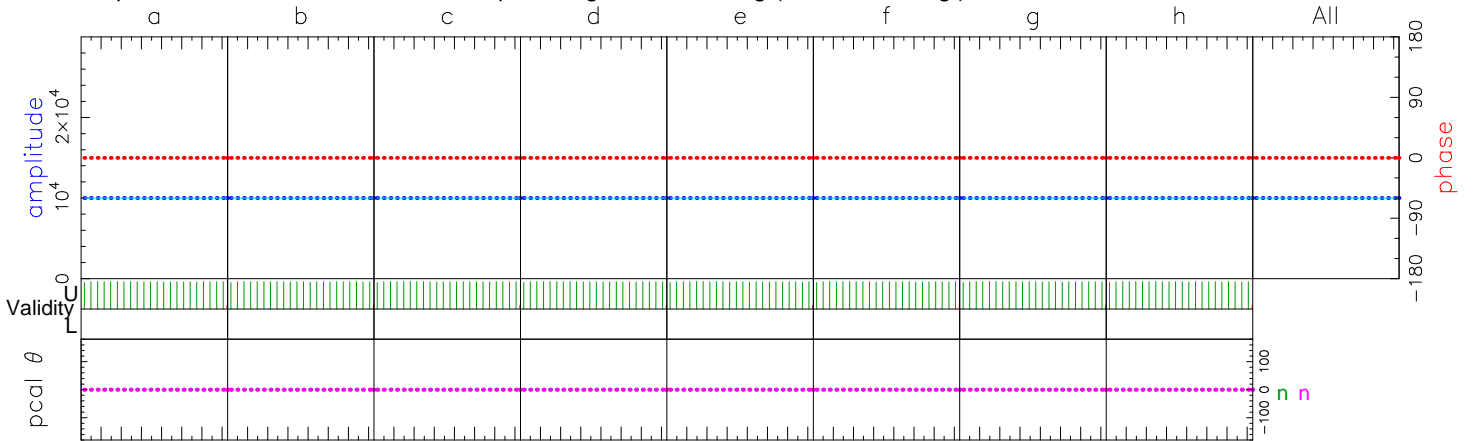


Fringe quality 9

SNR 557166.4
Int time 415.122
Amp 9999.992
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. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143606
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| n:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| n | 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 | | +/- 1.9E-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 | | +/- 1.5E-08 |
| Phase delay (usec) | -2.55245374379E-20 | -2.55245374379E-20 | -2.55245374379E-20 | -2.55245374379E-20 | -2.55245374379E-20 | -2.55245374379E-20 | -2.55245374379E-20 | -2.55245374379E-20 | | +/- 6.6E-12 |
| 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 | | +/- 2.7E-14 |
| Total phase (deg) | | | -0.0 | | | | | | | +/- 0.0 |

RMS Theor. Amplitude 9999.991 +/- 0.018
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.992
 amp/seg (%) 0.0 0.0 Interp. 0.000
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.991

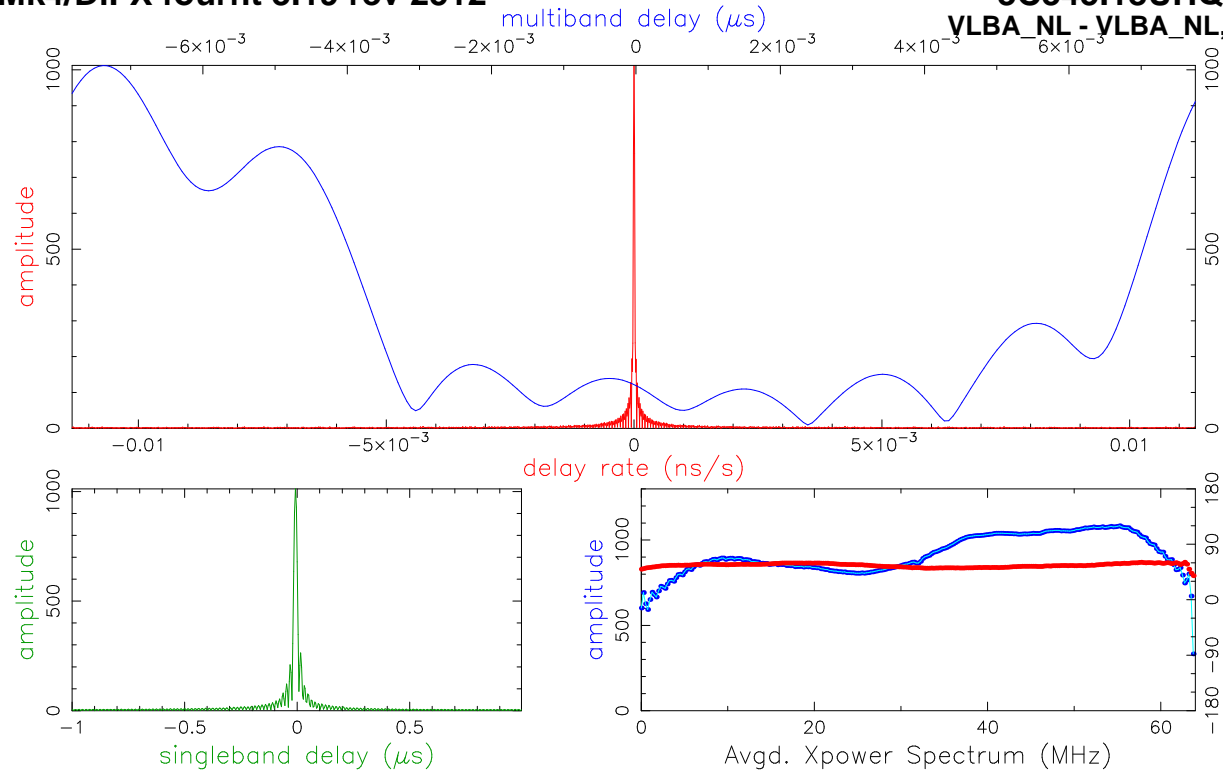
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.000000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.000000E+00 +/- 1.5E-08
 Phase delay (usec) -2.55245374379E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.55245E-20 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.000000E+00 +/- 2.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MISamp/s): 128
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite

sb window (us) -1.000 1.000
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

n: az 222.0 el 87.3 pa 44.3 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nn.W.164.18UHQS

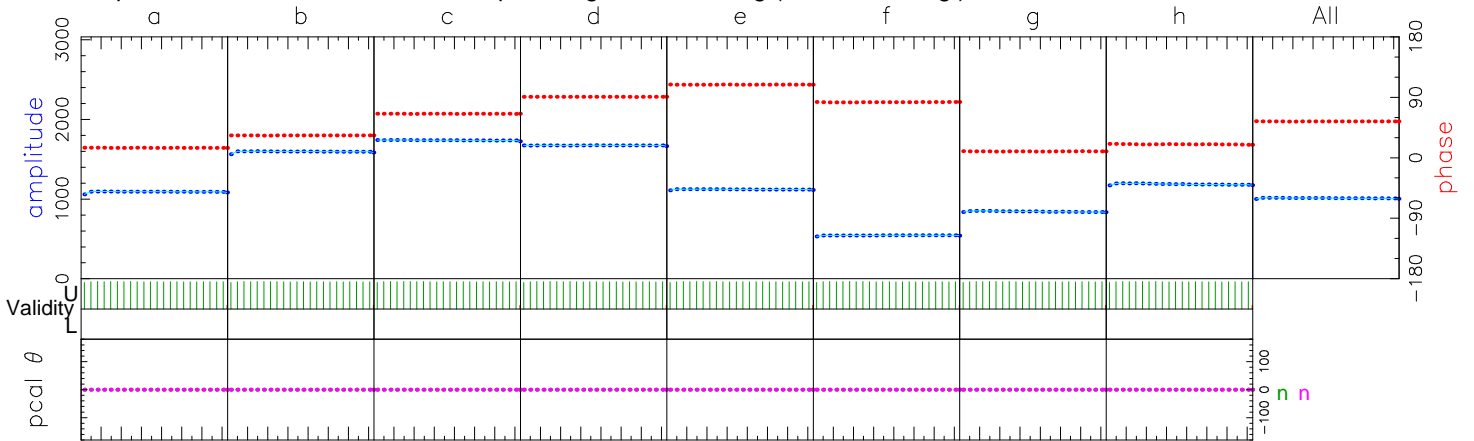


Fringe quality 5

SNR 56415.9
Int time 415.122
Amp 1012.550
Phase 54.1
PFD 0.0e+00
Delays (us)
SBD -0.007523
MBD -0.007362
Fringe rate (Hz)
-0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143610
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All | |
|-------------------------|----------|--------------------|----------|----------|----------|-------------------|----------|----------|----------------------|--------------|-------------|
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| n:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| n:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | | |
| Group delay (usec)(sbd) | | -7.36184375000E-03 | | | | 0.00000000000E+00 | | | Resid mbdelay (usec) | -7.36184E-03 | +/- 1.9E-08 |
| Sband delay (usec) | | -7.52250000000E-03 | | | | 0.0000000E+00 | | | Resid sbdelay (usec) | -7.52250E-03 | +/- 1.5E-07 |
| Phase delay (usec) | | 1.74483149020E-06 | | | | 0.0000000E+00 | | | Resid phdelay (usec) | 1.74483E-06 | +/- 6.6E-11 |
| Delay rate (us/s) | | -2.12567285875E-12 | | | | 0.00000000000E+00 | | | Resid rate (us/s) | -2.12567E-12 | +/- 2.7E-13 |
| Total phase (deg) | | | 54.1 | | | 0.00000000000E+00 | | | Resid phase (deg) | 54.1 | +/- 0.0 |

ph/seg (deg) 0.1 0.0
amp/seg (%) 0.3 0.0
ph/frq (deg) 41.6 0.0
amp/frq (%) 44.2 0.0

RMS Theor. Amplitude 1012.550 +/- 0.018
Search (2048X32) 1011.195
Interp. 0.000
Inc. seg. avg. 1011.998
Inc. frq. avg. 1224.714

Group delay (usec)(sbd) -7.36184375000E-03
Sband delay (usec) -7.52250000000E-03
Phase delay (usec) 1.74483149020E-06
Delay rate (us/s) -2.12567285875E-12
Total phase (deg) 54.1

Apriori delay (usec) 0.00000000000E+00
Apriori clock (usec) 0.0000000E+00
Apriori clockrate (us/s) 0.0000000E+00
Apriori rate (us/s) 0.00000000000E+00
Apriori accel (us/s/s) 0.00000000000E+00

Resid mbdelay (usec) -7.36184E-03
Resid sbdelay (usec) -7.52250E-03
Resid phdelay (usec) 1.74483E-06
Resid rate (us/s) -2.12567E-12
Resid phase (deg) 54.1

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

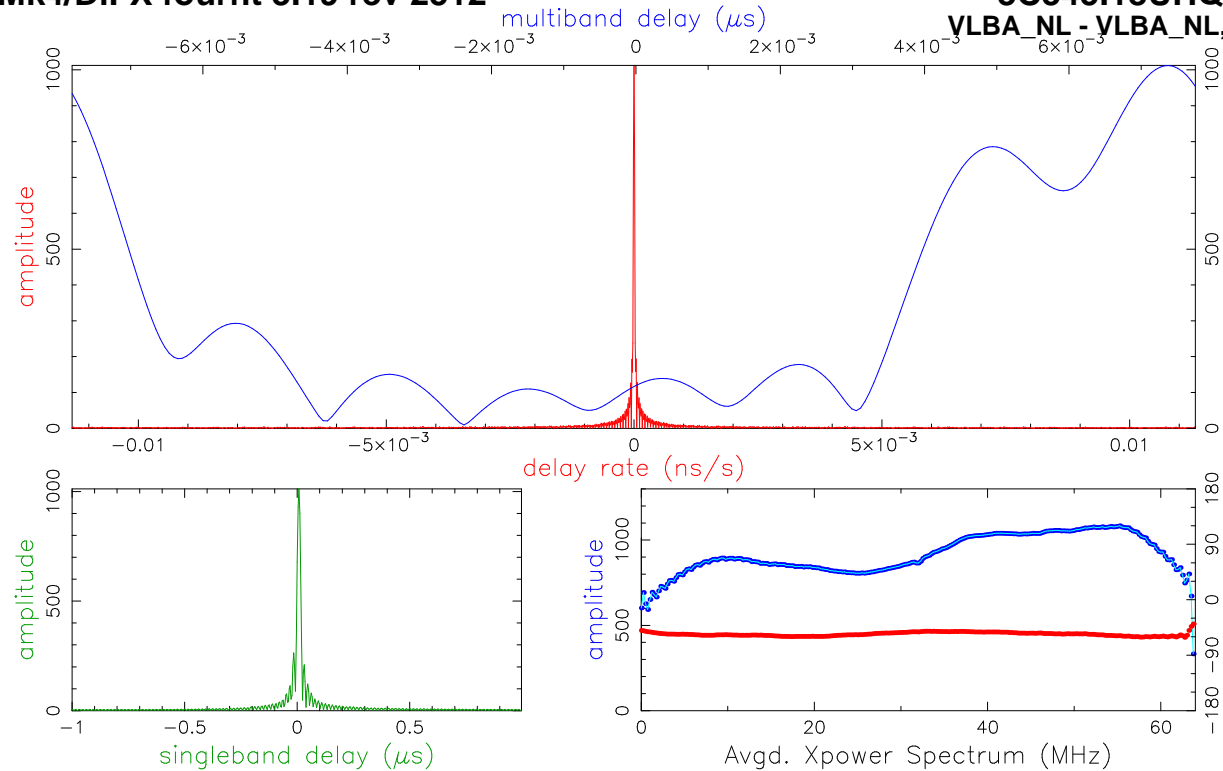
PC period (AP's) 5, 5
Sb window (us) -1.000 1.000
SampCntNorm: enabled
mb window (us) -0.008 0.008
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

n: az 222.0 el 87.3 pa 44.3
u,v (fr/asec) 0.000 0.000
simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nn.W.175.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, nn
VLBA_NL - VLBA_NL, fgroup W, pol RL

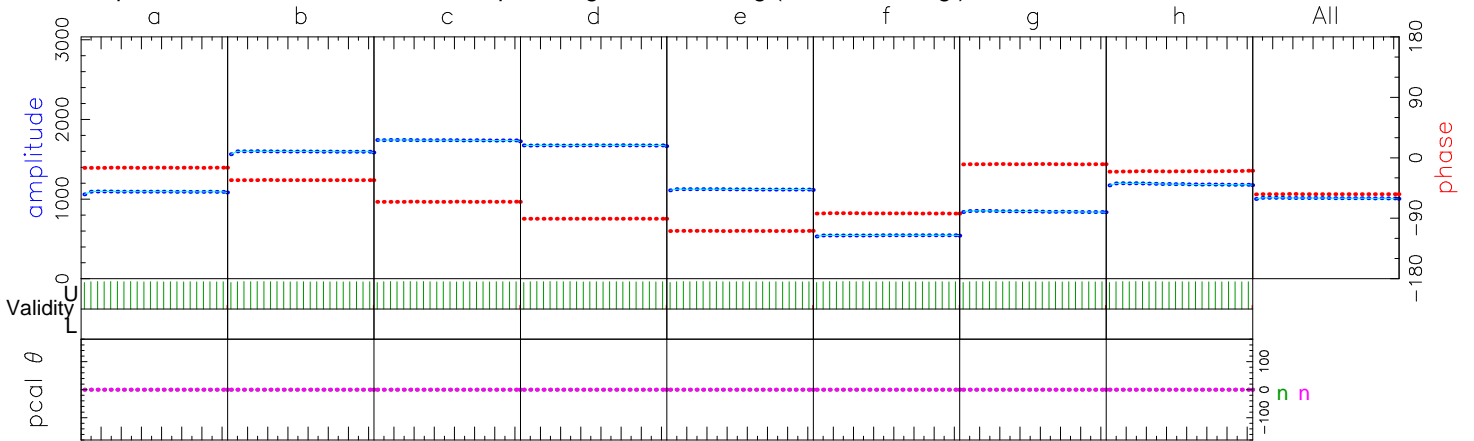


Fringe quality 5

SNR 56415.9
Int time 415.122
Amp 1012.550
Phase -54.1
PFD 0.0e+00
Delays (us)
SBD 0.007523
MBD 0.007362
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

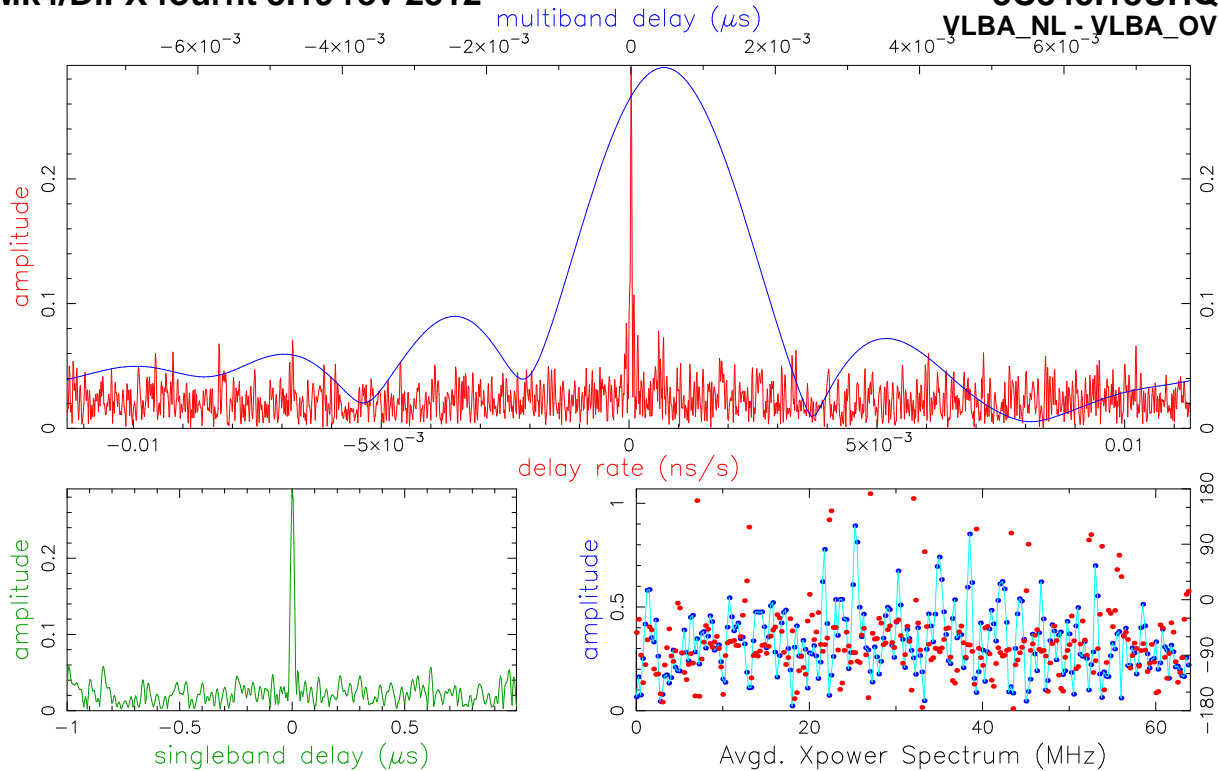
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 084100.51
Stop 084759.84
FRT 084430.00
Corr/FF/build
2020:198:173216
2020:199:143614
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



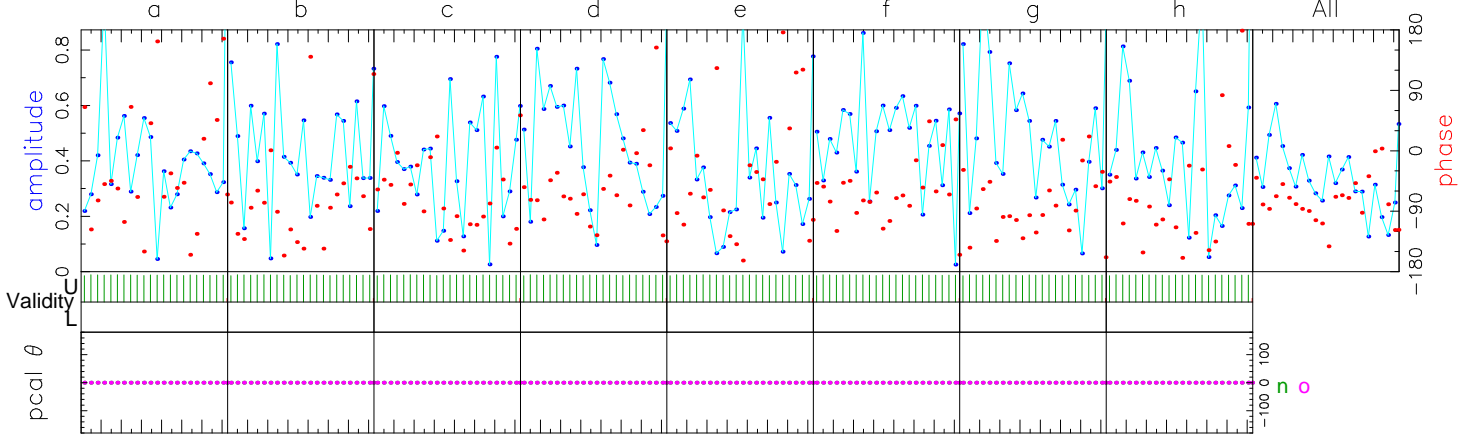
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|------------------|----------|----------------------|----------|--------------|-------------|
| | -14.8 | -33.2 | -65.5 | -90.7 | -108.8 | -82.7 | -9.5 | -20.1 | Phase | -54.1 |
| | 1091.4 | 1595.8 | 1738.9 | 1673.9 | 1121.6 | 544.4 | 844.1 | 1187.5 | Ampl. | 1224.7 |
| | 258.2 | 258.6 | 258.7 | 258.7 | 258.5 | 259.8 | 258.8 | 258.7 | Sbd box | 258.9 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 7.36184375000E-03 | | Apriori delay (usec) | | 0.0000000000E+00 | | Resid mbdelay (usec) | | 7.36184E-03 | +/- 1.9E-08 |
| Sband delay (usec) | 7.5225000000E-03 | | Apriori clock (usec) | | 0.0000000E+00 | | Resid sbdelay (usec) | | 7.52250E-03 | +/- 1.5E-07 |
| Phase delay (usec) | -1.74483149054E-06 | | Apriori clockrate (us/s) | | 0.0000000E+00 | | Resid phdelay (usec) | | -1.74483E-06 | +/- 6.6E-11 |
| Delay rate (us/s) | 2.12567285875E-12 | | Apriori rate (us/s) | | 0.0000000000E+00 | | Resid rate (us/s) | | 2.12567E-12 | +/- 2.7E-13 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 0.0000000000E+00 | | Resid phase (deg) | | -54.1 | +/- 0.0 |

ph/seg (deg) 0.1 0.0 Amplitude 1012.550 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 0.3 0.0 Search (2048X32) 1011.196 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 41.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 44.2 0.0 Inc. seg. avg. 1011.999 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
n: az 222.0 el 87.3 pa 44.3 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nn.W.191.18UHQS simultaneous interpolator



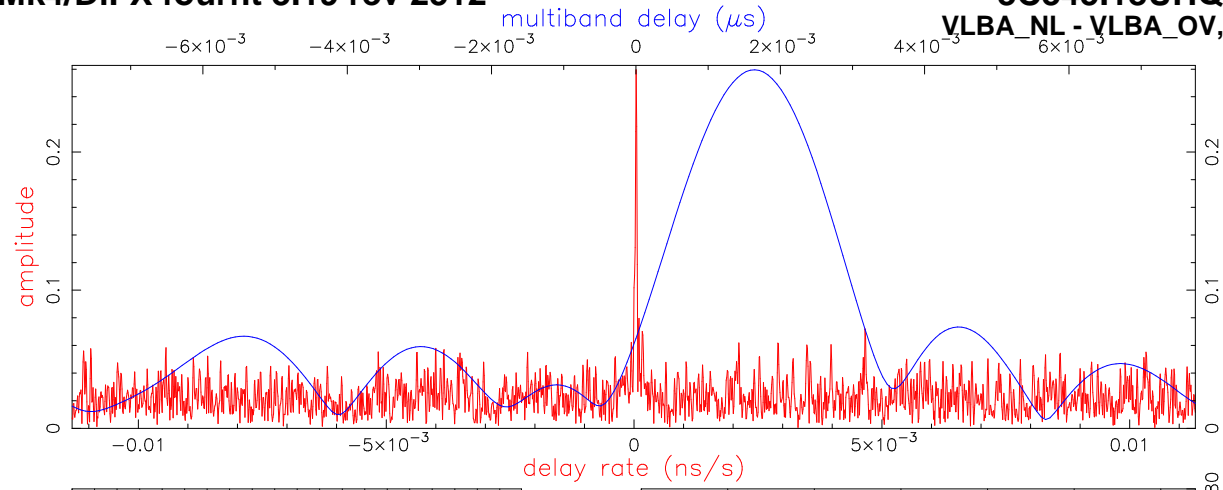
Fringe quality 9
 SNR 16.1
 Int time 410.443
 Amp 0.291
 Phase -74.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.001011
 MBD 0.000480
 Fringe rate (Hz) 0.003432
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143604
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -65.1 | -91.4 | -71.3 | -61.5 | -75.8 | -64.8 | -76.5 | -88.3 | Phase | -74.3 |
| | 0.2 | 0.3 | 0.3 | 0.4 | 0.2 | 0.4 | 0.4 | 0.3 | Ampl. | 0.3 |
| | 256.0 | 257.3 | 256.7 | 257.4 | 394.3 | 257.1 | 257.1 | 257.9 | Sbd box | 257.3 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.05460879975E+03 | | Apriori delay (usec) | | 1.05460832023E+03 | | Resid mbdelay (usec) | | 4.79516E-04 | +/- 6.7E-05 |
| Sband delay (usec) | 1.05460933148E+03 | | Apriori clock (usec) | | 1.2200552E+01 | | Resid sbdelay (usec) | | 1.01125E-03 | +/- 5.3E-04 |
| Phase delay (usec) | 1.05460831784E+03 | | Apriori clockrate (us/s) | | 1.3299997E-07 | | Resid phdelay (usec) | | -2.39456E-06 | +/- 2.3E-07 |
| Delay rate (us/s) | -4.28944246951E-01 | | Apriori rate (us/s) | | -4.28944286793E-01 | | Resid rate (us/s) | | 3.98422E-08 | +/- 9.5E-10 |
| Total phase (deg) | 179.5 | | Apriori accel (us/s/s) | | -1.13771046849E-06 | | Resid phase (deg) | | -74.3 | +/- 7.1 |

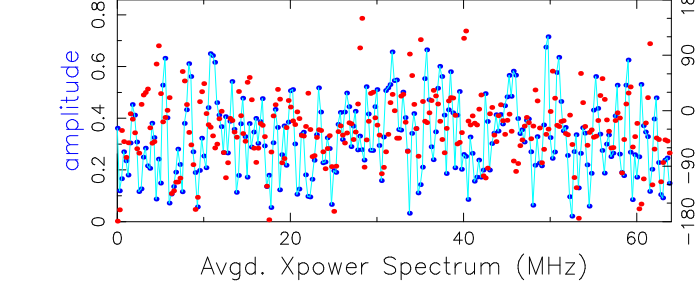
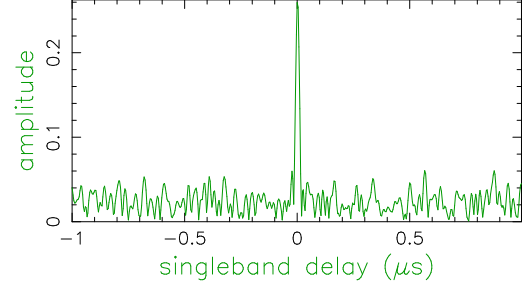
| | RMS | Theor. | Amplitude | 0.291 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|--|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 33.6 | 17.0 | Search (2048X32) | 0.278 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 41.1 | 29.7 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 11.8 | 10.1 | Inc. seg. avg. | 0.322 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 28.4 | 17.5 | Inc. frq. avg. | 0.290 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |



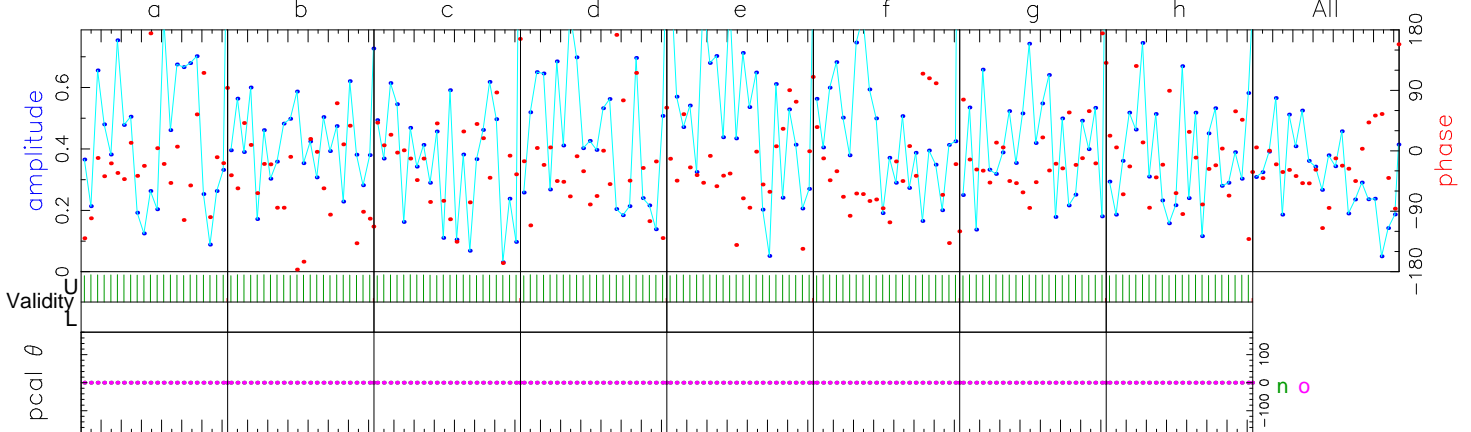
Fringe quality 9

SNR 14.6
 Int time 410.441
 Amp 0.263
 Phase -28.8
 PFD 3.3e-39
 Delays (us)
 SBD 0.001471
 MBD 0.001670
 Fringe rate (Hz) 0.003378
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143607
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

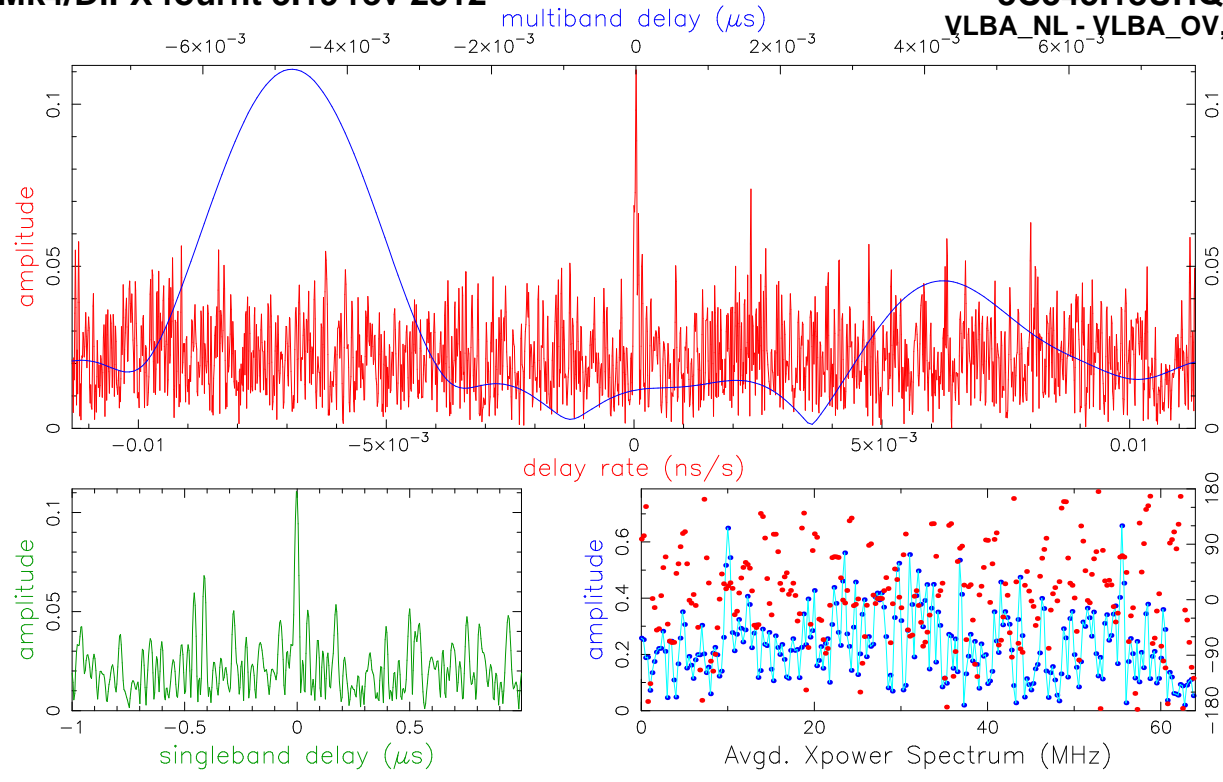


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -26.1 | -37.6 | -0.1 | -39.4 | -25.4 | -52.1 | -22.6 | -24.3 | Phase | -28.8 |
| | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | Ampl. | 0.3 |
| | 256.3 | 372.9 | 256.9 | 257.5 | 257.9 | 256.9 | 257.6 | 257.6 | Sbd box | 257.4 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| o | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.05460999044E+03 | | Apriori delay (usec) | | 1.05460832023E+03 | | Resid mbdelay (usec) | | 1.67020E-03 | +/- 7.5E-05 |
| Sband delay (usec) | 1.05460979073E+03 | | Apriori clock (usec) | | 1.2200552E+01 | | Resid sbdelay (usec) | | 1.47050E-03 | +/- 5.9E-04 |
| Phase delay (usec) | 1.05460831931E+03 | | Apriori clockrate (us/s) | | 1.3299997E-07 | | Resid phdelay (usec) | | -9.28198E-07 | +/- 2.5E-07 |
| Delay rate (us/s) | -4.28944247574E-01 | | Apriori rate (us/s) | | -4.28944286793E-01 | | Resid rate (us/s) | | 3.92194E-08 | +/- 1.0E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -1.13771046849E-06 | | Resid phase (deg) | | -28.8 | +/- 7.9 |

ph/seg (deg) 43.1 18.9 Search (2048X32) 0.263 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.7 32.9 Interp. 0.249 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.5 11.1 Inc. seg. avg. 0.300 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 18.3 19.4 Inc. frq. avg. 0.262 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 222.0 el 87.3 pa 44.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 3193.831 293.637 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/no..18UHQS Output file: /Exps/c201b/v1/1234/No0057/no.W.167.18UHQS

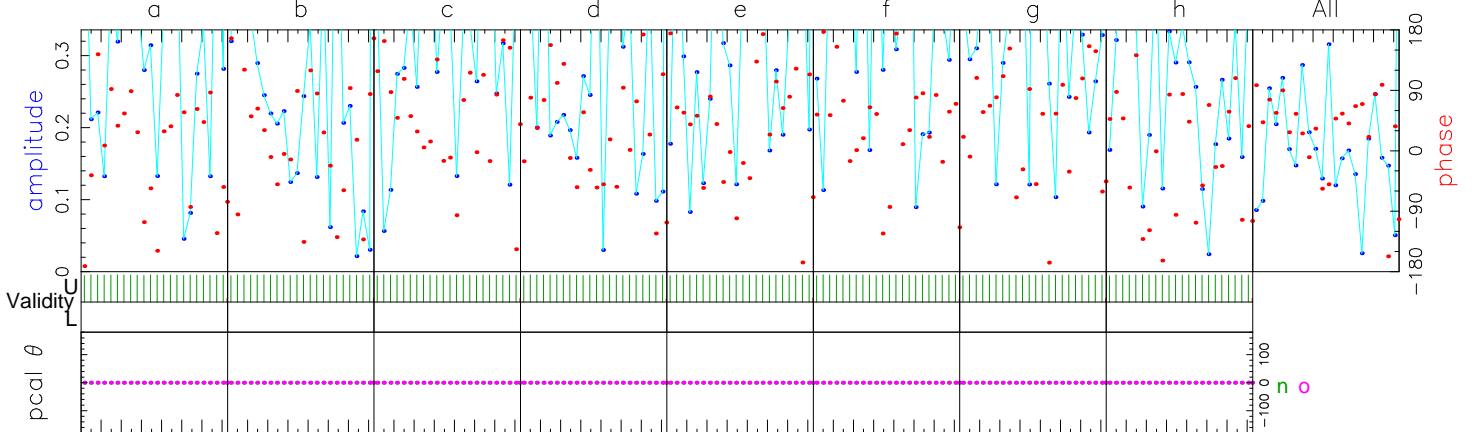


Fringe quality 0

SNR 6.2
 Int time 410.441
 Amp 0.112
 Phase 43.9
 PFD 1.4e-01
 Delays (us)
 SBD -0.002214
 MBD -0.004688
 Fringe rate (Hz) 0.003654
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

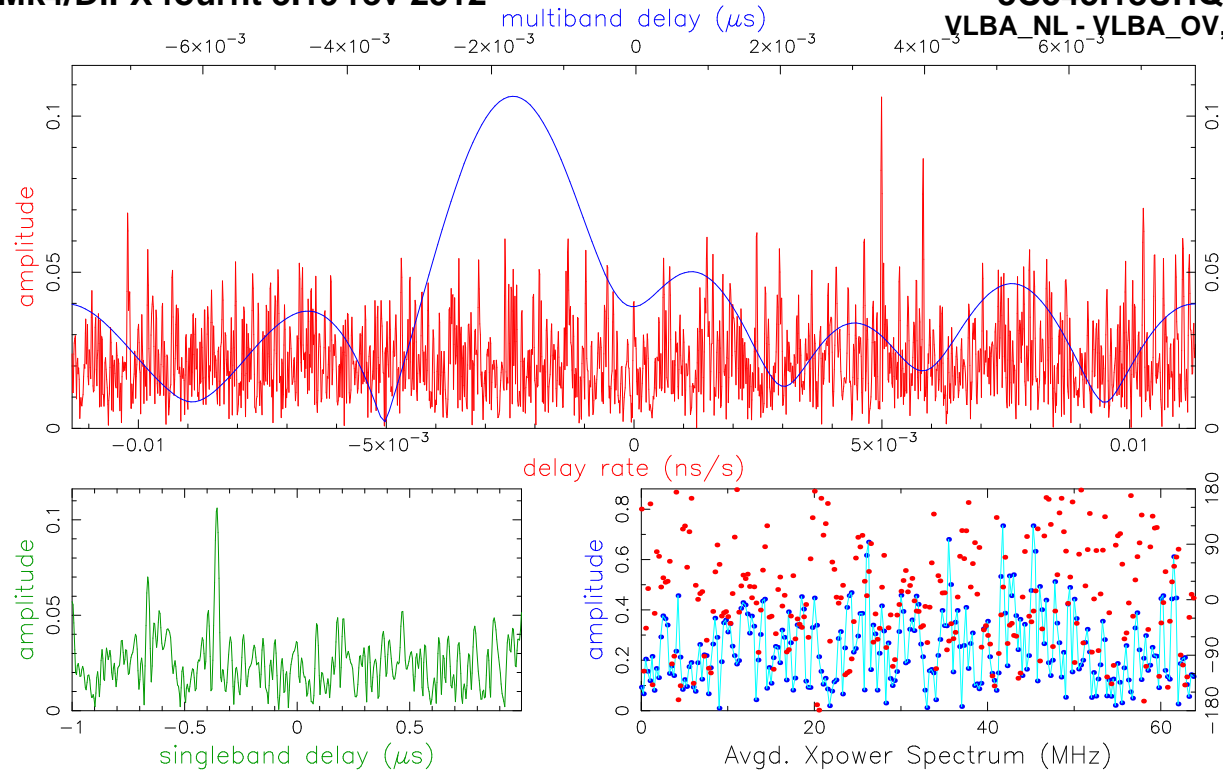
Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143611
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| 45.4 | 60.2 | 56.4 | 19.3 | 72.1 | 39.0 | 42.9 | 27.6 | 27.6 | Phase | 43.9 |
| 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | Ampl. | 0.1 |
| 8.0 | 140.0 | 229.2 | 310.8 | 46.9 | 254.7 | 180.2 | 127.1 | 127.1 | Sbd box | 256.4 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| o | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.05460363203E+03 | | Apriori delay (usec) | | 1.05460832023E+03 | | Resid mbdelay (usec) | | -4.68820E-03 | +/- 1.7E-04 |
| Sband delay (usec) | 1.05460610623E+03 | | Apriori clock (usec) | | 1.2200552E+01 | | Resid sbdelay (usec) | | -2.21400E-03 | +/- 1.4E-03 |
| Phase delay (usec) | 1.05460832165E+03 | | Apriori clockrate (us/s) | | 1.3299997E-07 | | Resid phdelay (usec) | | 1.41463E-06 | +/- 6.0E-07 |
| Delay rate (us/s) | -4.28944244372E-01 | | Apriori rate (us/s) | | -4.28944286793E-01 | | Resid rate (us/s) | | 4.24206E-08 | +/- 2.5E-09 |
| Total phase (deg) | 297.7 | | Apriori accel (us/s/s) | | -1.13771046849E-06 | | Resid phase (deg) | | 43.9 | +/- 18.5 |

ph/seg (deg) 53.5 44.3 Search (2048X32) 0.109 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 92.9 77.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.8 26.1 Inc. seg. avg. 0.133 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.0 45.6 Inc. frq. avg. 0.104 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 222.0 el 87.3 pa 44.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 3193.831 293.637 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/no..18UHQS Output file: /Exps/c201b/v1/1234/No0057/no.W.178.18UHQS

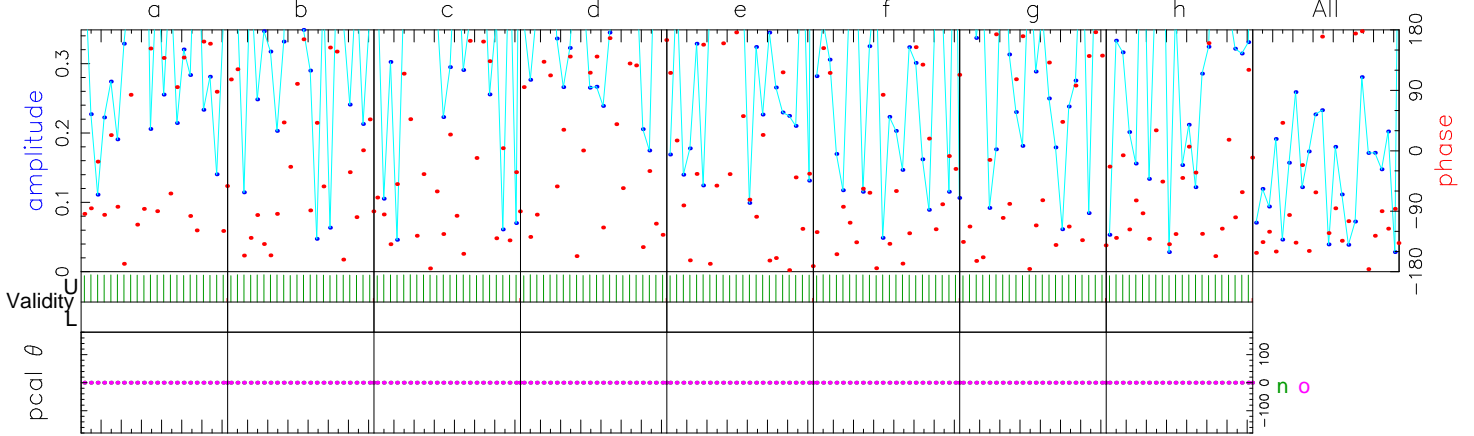


Fringe quality 0

SNR 5.9
 Int time 410.442
 Amp 0.116
 Phase -131.4
 PFD 5.3e-01
 Delays (us)
 SBD -0.356921
 MBD -0.001774
 Fringe rate (Hz) 0.431187
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

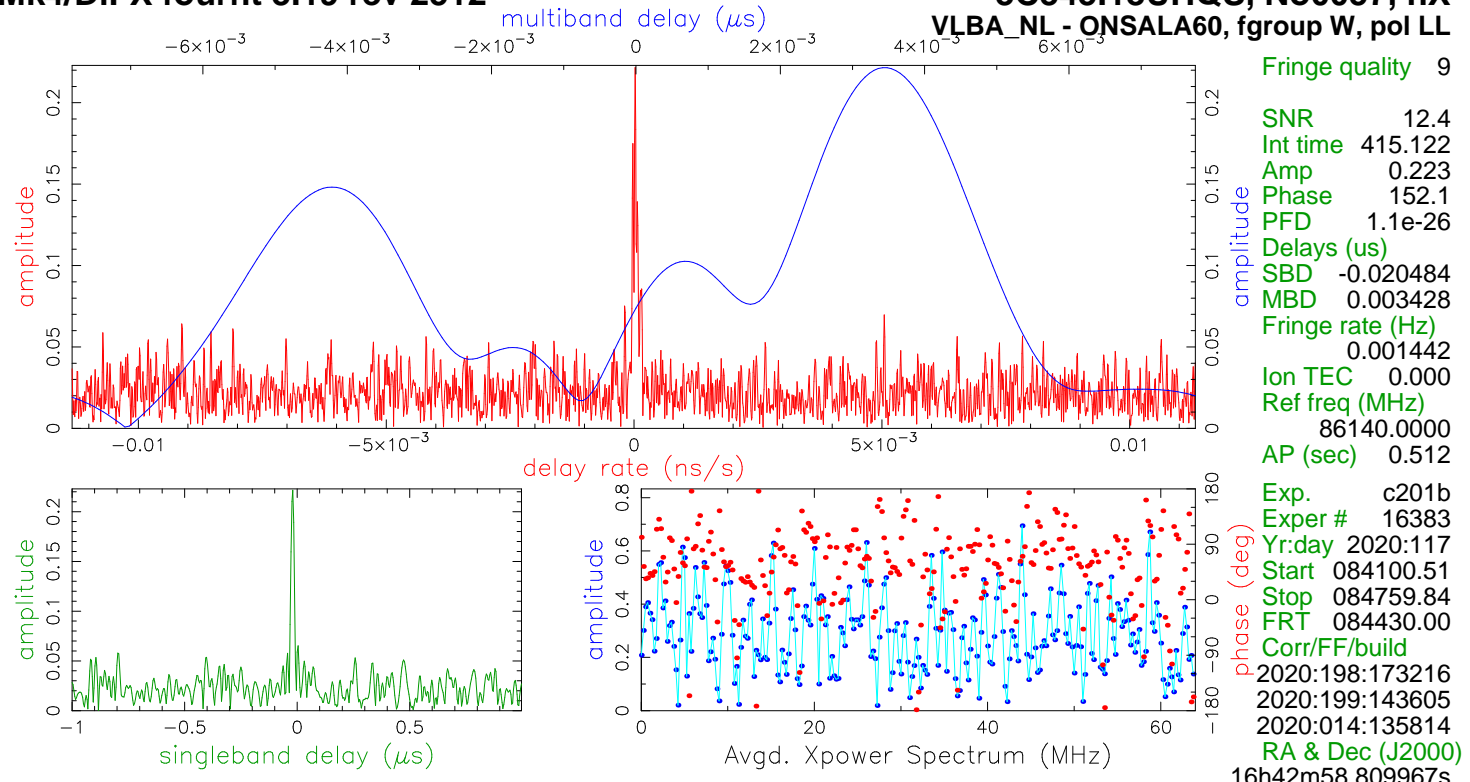
Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143615
 2020:014:135814
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

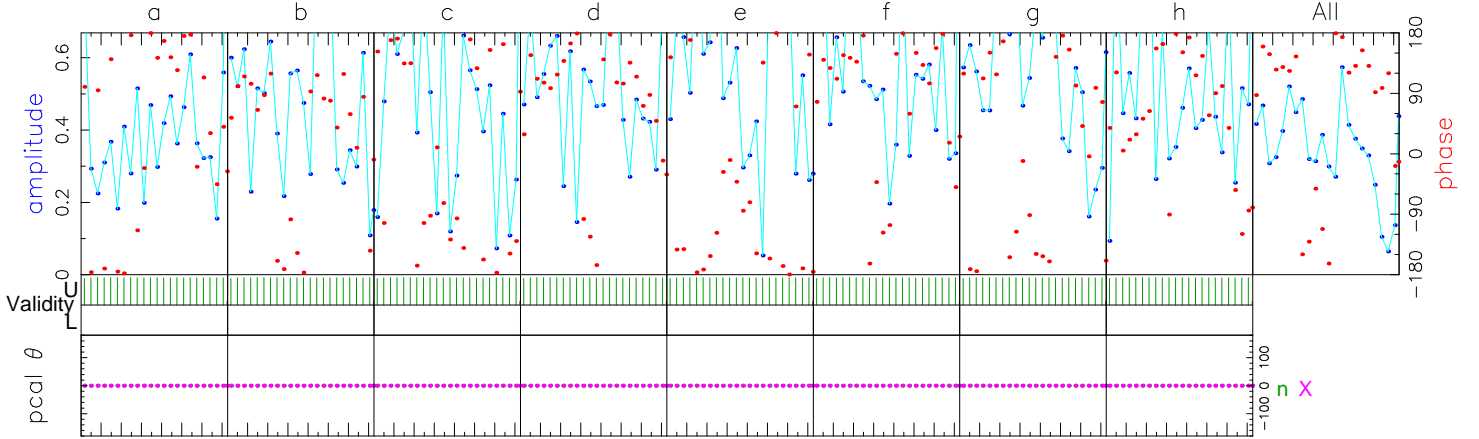


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -116.0 | -146.4 | -126.3 | 170.2 | -140.9 | -121.0 | -149.8 | -88.7 | Phase | -131.4 |
| | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | Ampl. | 0.1 |
| | 443.5 | 297.1 | 415.2 | 263.8 | 163.1 | 302.8 | 165.8 | 255.1 | Sbd box | 165.6 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.05424717121E+03 | | Apriori delay (usec) | | 1.05460832023E+03 | | Resid mbdelay (usec) | | -1.77403E-03 | +/- 1.8E-04 |
| Sband delay (usec) | 1.05425139873E+03 | | Apriori clock (usec) | | 1.2200552E+01 | | Resid sbdelay (usec) | | -3.56921E-01 | +/- 1.5E-03 |
| Phase delay (usec) | 1.05460831600E+03 | | Apriori clockrate (us/s) | | 1.3299997E-07 | | Resid phdelay (usec) | | -4.23629E-06 | +/- 6.2E-07 |
| Delay rate (us/s) | -4.28939281142E-01 | | Apriori rate (us/s) | | -4.28944286793E-01 | | Resid rate (us/s) | | 5.00565E-06 | +/- 2.6E-09 |
| Total phase (deg) | 122.4 | | Apriori accel (us/s/s) | | -1.13771046849E-06 | | Resid phase (deg) | | -131.4 | +/- 19.3 |

ph/seg (deg) 55.1 46.3 Amplitude 0.116 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.5 80.8 Search (2048X32) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.3 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.3 47.6 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 n: az 222.0 el 87.3 pa 44.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 3193.831 293.637 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/no..18UHQS Output file: /Exps/c201b/v1/1234/No0057/no.W.193.18UHQS simultaneous interpolator



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

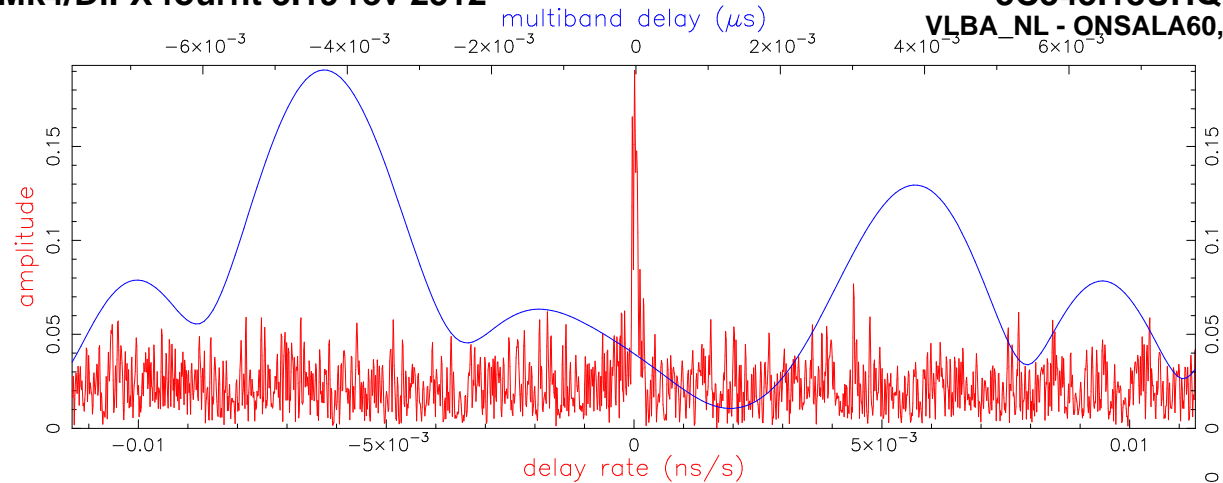


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|--------------------------|--------------------|----------------------|--------------|----------|----------|------------|-------|
| 150.1 | 102.2 | -166.7 | 123.8 | -153.4 | 142.6 | 170.5 | 89.0 | 89.0 | Phase | 152.1 |
| 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | Ampl. | 0.3 |
| 163.8 | 250.8 | 251.4 | 251.3 | 251.1 | 250.9 | 251.1 | 249.5 | 249.5 | Sbd box | 251.8 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| X | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.23613358334E+04 | | Apriori delay (usec) | 1.23613636556E+04 | Resid mbdelay (usec) | 3.42782E-03 | +/- | 8.7E-05 | | |
| Sband delay (usec) | 1.23613431716E+04 | | Apriori clock (usec) | -8.4750519E+00 | Resid sbdelay (usec) | -2.04840E-02 | +/- | 6.9E-04 | | |
| Phase delay (usec) | 1.23613636605E+04 | | Apriori clockrate (us/s) | -1.9400004E-07 | Resid phdelay (usec) | 4.90581E-06 | +/- | 3.0E-07 | | |
| Delay rate (us/s) | 5.62634056172E-01 | | Apriori rate (us/s) | 5.62634039435E-01 | Resid rate (us/s) | 1.67375E-08 | +/- | 1.2E-09 | | |
| Total phase (deg) | | 258.0 | Apriori accel (us/s/s) | -7.85183511430E-05 | Resid phase (deg) | 152.1 | +/- | 9.2 | | |

| | RMS | Theor. | Amplitude | 0.223 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | | | |
|--------------|------|--------|------------------|-----------------|--|-----------------------|-------------------|------------------|-------|------|
| ph/seg (deg) | 65.4 | 22.1 | Search (2048X32) | 0.212 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 | 1.000 | | |
| amp/seg (%) | 78.1 | 38.6 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 | |
| ph/frq (deg) | 45.4 | 13.0 | Inc. seg. avg. | 0.320 | Sample rate(MISamp/s): 128 | | dr window (ns/s) | -0.011 | 0.011 | |
| amp/frq (%) | 39.3 | 22.8 | Inc. frq. avg. | 0.276 | Data rate(Mb/s): 2048 | nlags: 256 | t_cohere infinite | ion window (TEC) | 0.00 | 0.00 |

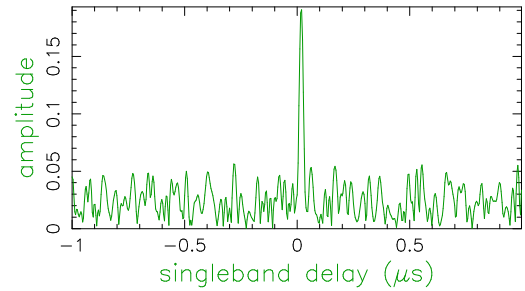
n: az 222.0 el 87.3 pa 44.3 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -4363.312 -6271.064 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nX.W.160.18UHQS

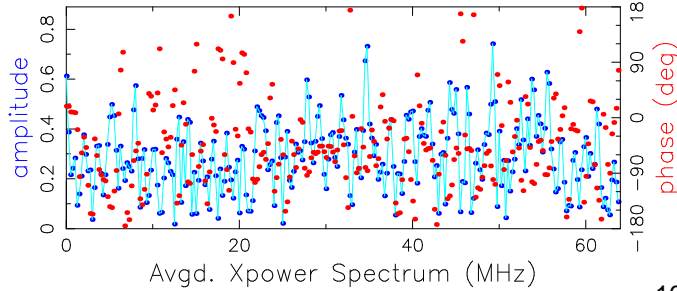


Fringe quality 9

SNR 10.8
 Int time 415.122
 Amp 0.193
 Phase -166.4
 PFD 2.4e-18
 Delays (us)
 SBD 0.017924
 MBD -0.004372
 Fringe rate (Hz)
 0.001301
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

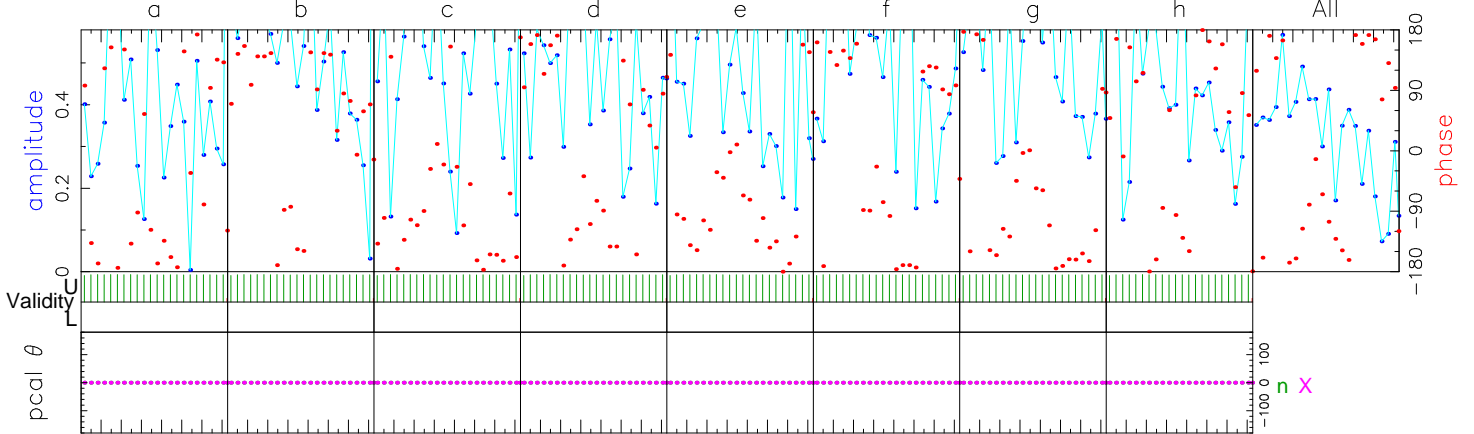


delay rate (ns/s)

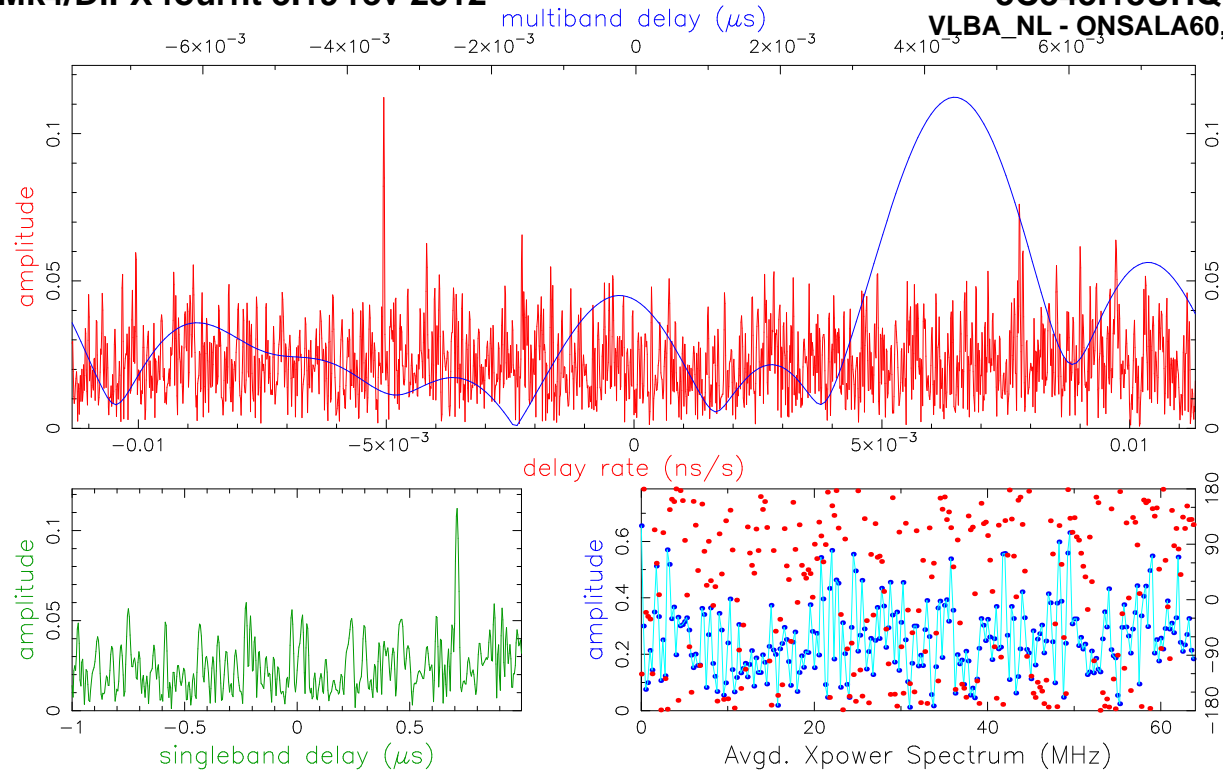


Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143609
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

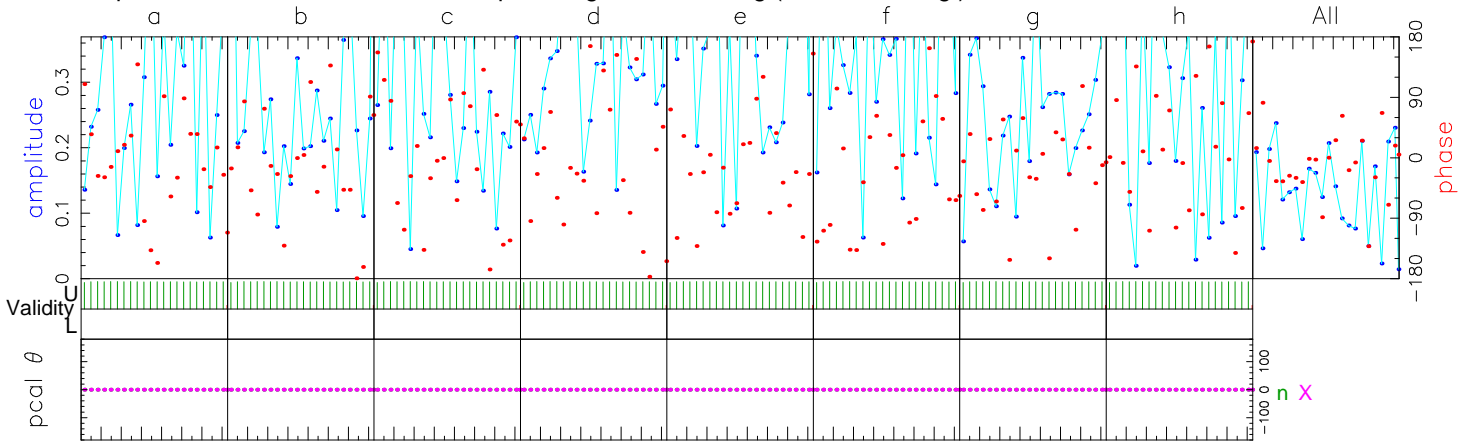


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-----------------------------|-----------------------------|-----------|-----------------------------------|----------|--|----------|------------------------------|----------|---------------------------|--------------|
| | -179.5 | 136.1 | -115.0 | -163.8 | -124.9 | 169.4 | -136.3 | 143.8 | Phase | -166.4 |
| | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | Ampl. | 0.2 |
| | 260.5 | 261.8 | 262.3 | 260.8 | 260.1 | 262.3 | 260.7 | 259.4 | Sbd box | 261.6 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 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) | 1.23613749083E+04 | | Apriori delay (usec) | | 1.23613636556E+04 | | Resid mbdelay (usec) | | -4.37228E-03 | +/- 1.0E-04 |
| Sband delay (usec) | 1.23613815791E+04 | | Apriori clock (usec) | | -8.4750519E+00 | | Resid sbdelay (usec) | | 1.79235E-02 | +/- 8.0E-04 |
| Phase delay (usec) | 1.23613636502E+04 | | Apriori clockrate (us/s) | | -1.9400004E-07 | | Resid phdelay (usec) | | -5.36457E-06 | +/- 3.4E-07 |
| Delay rate (us/s) | 5.62634054537E-01 | | Apriori rate (us/s) | | 5.62634039435E-01 | | Resid rate (us/s) | | 1.51022E-08 | +/- 1.4E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -7.85183511430E-05 | | Resid phase (deg) | | -166.4 | +/- 10.6 |
| RMS | Theor. | Amplitude | 0.193 +/- 0.018 | | Pcal mode: MANUAL, MANUAL | | PC period (AP's) 5, 5 | | | |
| ph/seg (deg) | 63.8 | 25.5 | Search (2048X32) | 0.186 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | | -1.000 | 1.000 |
| amp/seg (%) | 95.3 | 44.6 | Interp. | 0.000 | Bits/sample: 2x2 | | SampCntNorm: enabled | | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 44.4 | 15.1 | Inc. seg. avg. | 0.303 | Sample rate(MISamp/s): 128 | | dr window (ns/s) | | -0.011 | 0.011 |
| amp/frq (%) | 34.4 | 26.3 | Inc. frq. avg. | 0.236 | Data rate(Mb/s): 2048 | | nlags: 256 t_cohere infinite | | ion window (TEC) | 0.00 0.00 |
| n: az 222.0 el 87.3 pa 44.3 | X: az 305.2 el 25.2 pa 32.9 | | u,v (fr/asec) -4363.312 -6271.064 | | | | | | simultaneous interpolator | |



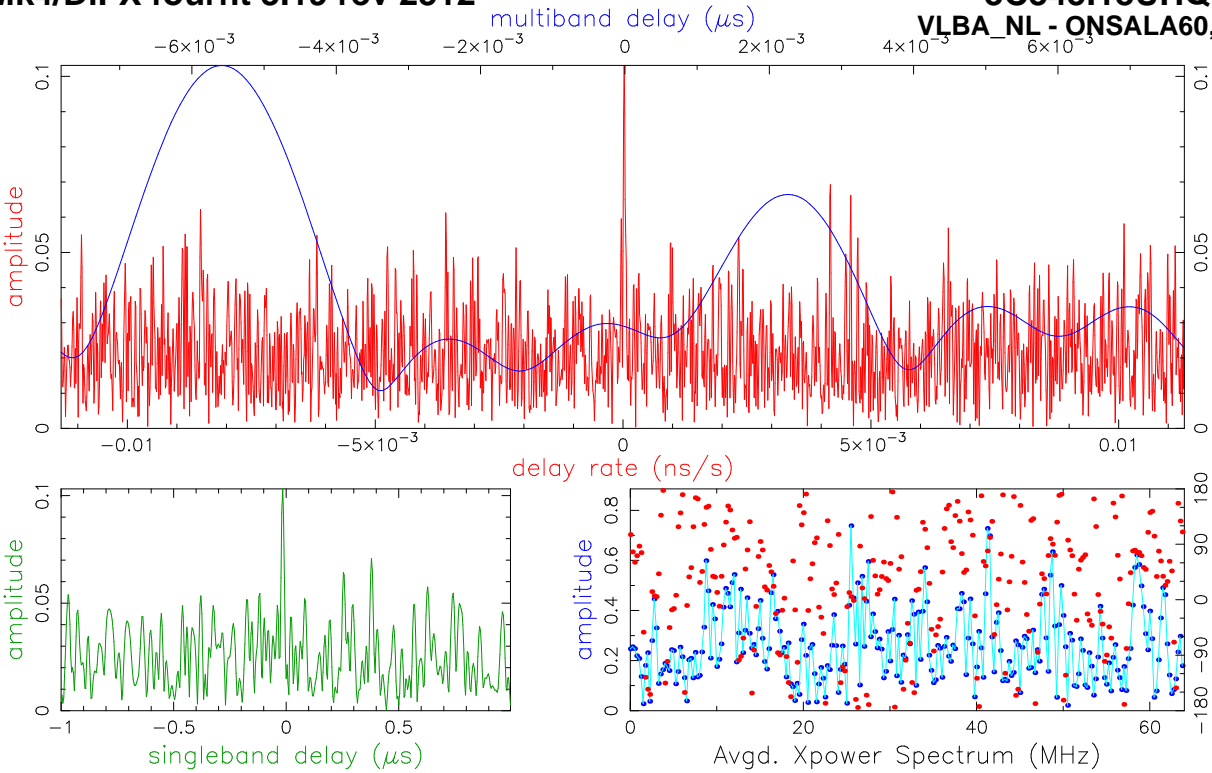
Fringe quality 0
 SNR 6.3
 Int time 415.122
 Amp 0.123
 Phase -10.5
 PFD 7.2e-02
 Delays (us)
 SBD 0.709724
 MBD 0.004374
 Fringe rate (Hz)
 -0.435754
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143613
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -5.0 | -18.4 | 32.8 | -31.2 | -25.2 | -42.6 | -8.7 | 14.8 | Phase | -10.5 |
| | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | Ampl. | 0.1 |
| | 334.5 | 437.5 | 320.2 | 97.8 | 108.8 | 380.7 | 313.5 | 268.3 | Sbd box | 438.7 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 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) | 1.23620711546E+04 | | Apriori delay (usec) | | 1.23613636556E+04 | | Resid mbdelay (usec) | | 4.37404E-03 | +/- 1.7E-04 |
| Sband delay (usec) | 1.23620733796E+04 | | Apriori clock (usec) | | -8.4750519E+00 | | Resid sbdelay (usec) | | 7.09724E-01 | +/- 1.4E-03 |
| Phase delay (usec) | 1.23613636553E+04 | | Apriori clockrate (us/s) | | -1.9400004E-07 | | Resid phdelay (usec) | | -3.39173E-07 | +/- 5.9E-07 |
| Delay rate (us/s) | 5.62628980763E-01 | | Apriori rate (us/s) | | 5.62634039435E-01 | | Resid rate (us/s) | | -5.05867E-06 | +/- 2.4E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | -7.85183511430E-05 | | Resid phase (deg) | | -10.5 | +/- 18.2 |

ph/seg (deg) 48.1 43.5 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.6 76.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.7 25.7 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.3 44.8 Inc. frq. avg. 0.118 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 222.0 el 87.3 pa 44.3 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -4363.312 -6271.064 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nX.W.185.18UHQS

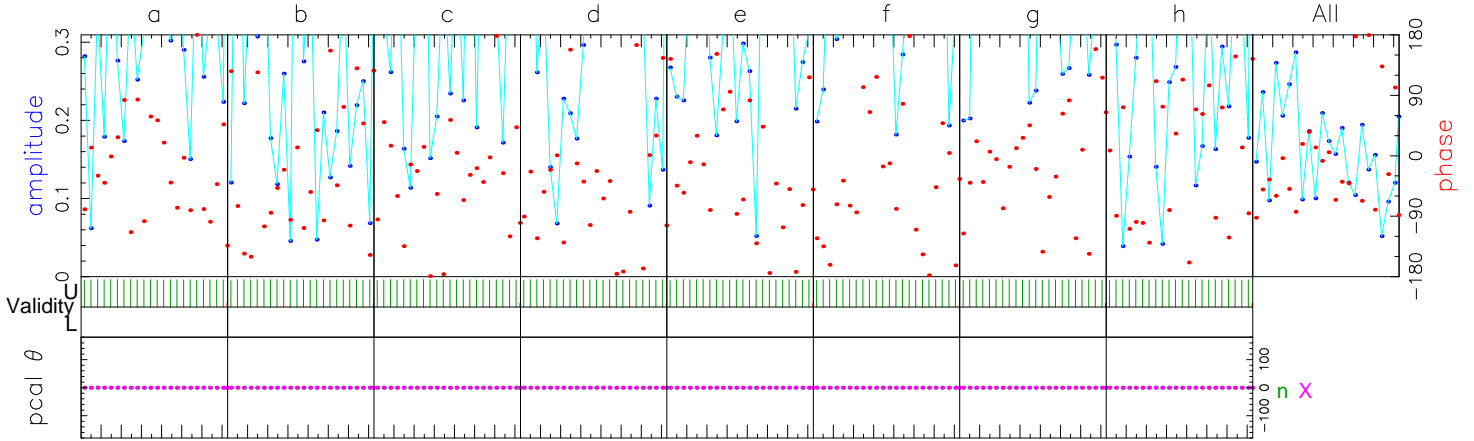


Fringe quality 0

SNR 5.7
 Int time 415.122
 Amp 0.103
 Phase -42.4
 PFD 9.0e-01
 Delays (us)
 SBD -0.015775
 MBD -0.005593
 Fringe rate (Hz)
 0.002020
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

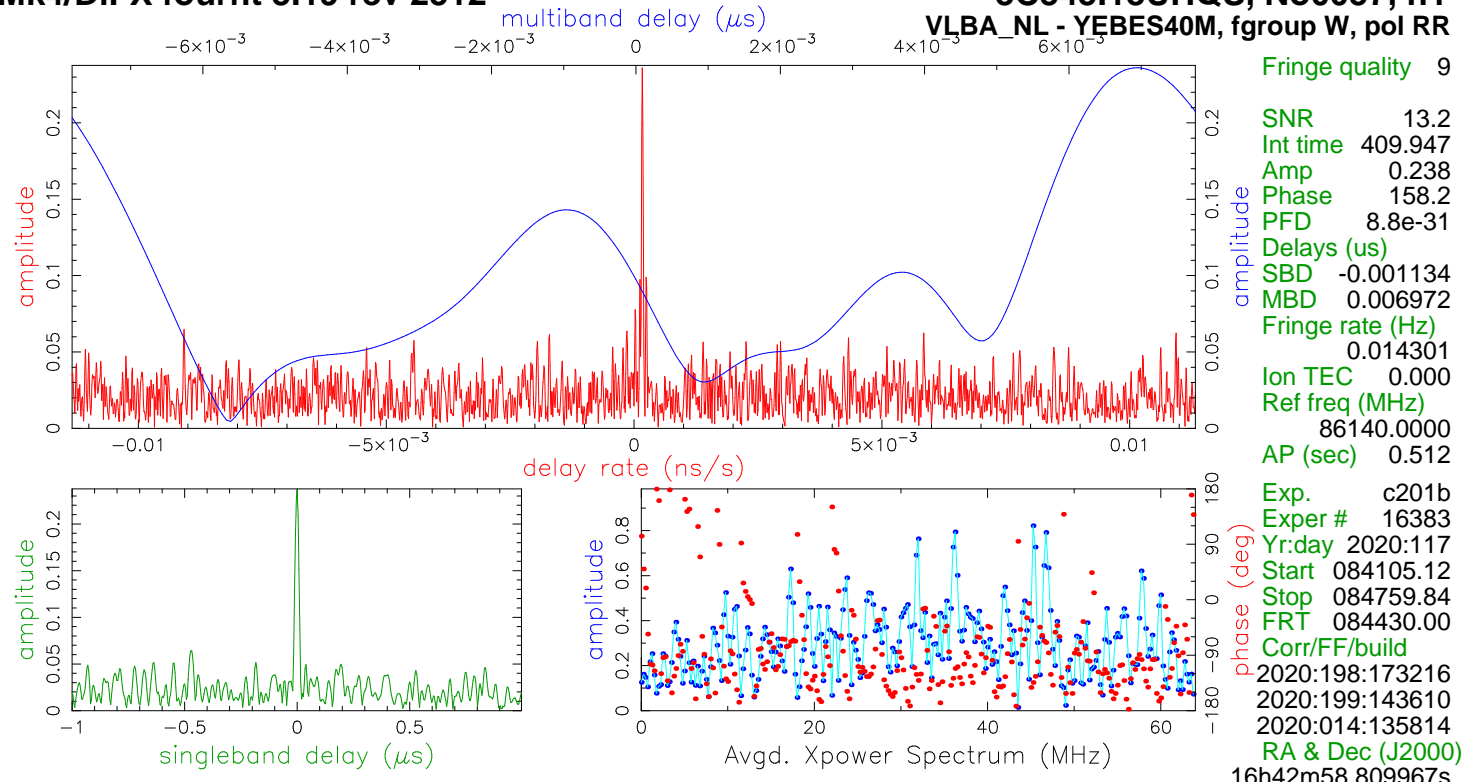
Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143617
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -25.6 | -66.3 | -24.2 | -84.6 | -18.3 | -76.3 | -16.3 | -154.1 | Phase | -42.4 |
| | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | Ampl. | 0.1 |
| | 85.5 | 406.8 | 252.7 | 173.9 | 296.8 | 478.7 | 252.7 | 387.8 | Sbd box | 253.0 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:X | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| X | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.23613424374E+04 | | Apriori delay (usec) | | 1.23613636556E+04 | | Resid mbdelay (usec) | | -5.59318E-03 | +/- 1.9E-04 |
| Sband delay (usec) | 1.23613478804E+04 | | Apriori clock (usec) | | -8.4750519E+00 | | Resid sbdelay (usec) | | -1.57753E-02 | +/- 1.5E-03 |
| Phase delay (usec) | 1.23613636542E+04 | | Apriori clockrate (us/s) | | -1.9400004E-07 | | Resid phdelay (usec) | | -1.36842E-06 | +/- 6.4E-07 |
| Delay rate (us/s) | 5.62634062882E-01 | | Apriori rate (us/s) | | 5.62634039435E-01 | | Resid rate (us/s) | | 2.34476E-08 | +/- 2.7E-09 |
| Total phase (deg) | 63.4 | | Apriori accel (us/s/s) | | -7.85183511430E-05 | | Resid phase (deg) | | -42.4 | +/- 19.9 |

ph/seg (deg) 72.2 47.8 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.6 83.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.5 28.2 Inc. seg. avg. 0.121 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 57.6 49.2 Inc. frq. avg. 0.108 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 222.0 el 87.3 pa 44.3 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -4363.312 -6271.064 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nX.W.202.18UHQS



Fringe quality 9

SNR 13.2

Int time 409.947

Amp 0.238

Phase 158.2

PFD 8.8e-31

Delays (us)

SBD -0.001134

MBD 0.006972

Fringe rate (Hz)

0.014301

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201b

Exper # 16383

Yr:day 2020:117

Start 084105.12

Stop 084759.84

FRT 084430.00

Corr/FF/build

2020:198:173216

2020:199:143610

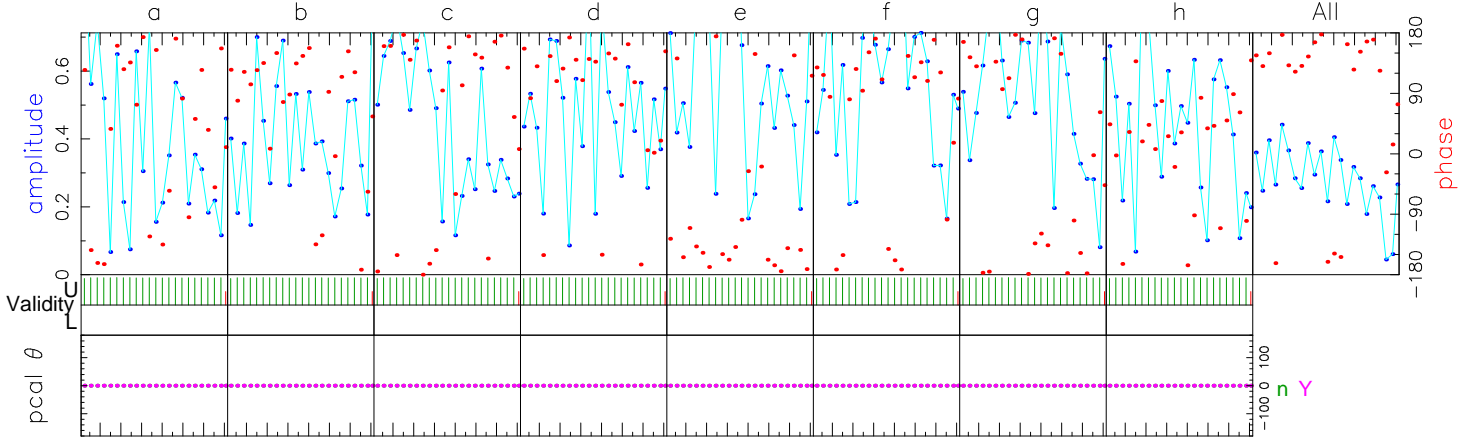
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

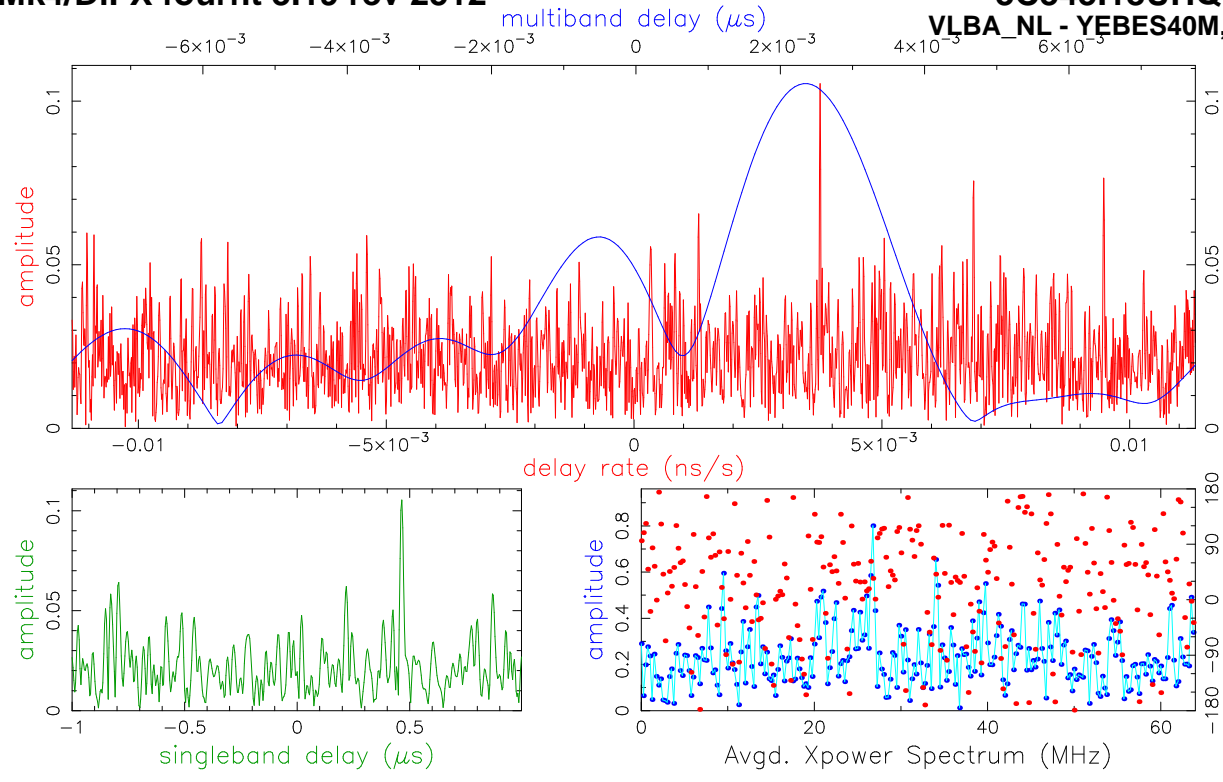


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | 162.0 | 126.9 | 169.9 | 135.8 | -152.9 | 143.2 | 176.9 | 27.0 | Phase | 158.2 |
| | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.2 | Ampl. | 0.3 |
| | 471.5 | 255.8 | 256.6 | 256.4 | 255.8 | 256.1 | 255.7 | 254.0 | Sbd box | 256.7 |
| U/L | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| Y | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.28531224776E+04 | | Apriori delay (usec) | | 1.28531311302E+04 | | Resid mbdelay (usec) | | 6.97239E-03 | +/- 8.3E-05 |
| Sband delay (usec) | 1.28531299962E+04 | | Apriori clock (usec) | | 2.0317902E+01 | | Resid sbdelay (usec) | | -1.13400E-03 | +/- 6.5E-04 |
| Phase delay (usec) | 1.28531311353E+04 | | Apriori clockrate (us/s) | | 1.1399998E-07 | | Resid phdelay (usec) | | 5.10297E-06 | +/- 2.8E-07 |
| Delay rate (us/s) | 8.53839388733E-01 | | Apriori rate (us/s) | | 8.53839222716E-01 | | Resid rate (us/s) | | 1.66016E-07 | +/- 1.2E-09 |
| Total phase (deg) | 358.1 | | Apriori accel (us/s/s) | | -6.70603846450E-05 | | Resid phase (deg) | | 158.2 | +/- 8.7 |

| | RMS | Theor. | Amplitude | 0.238 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 1.000 |
|--------------|------|--------|------------------|-----------------|--|------------------------------|------------------|--------------|
| ph/seg (deg) | 55.9 | 20.9 | Search (2048X32) | 0.235 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 0.008 |
| amp/seg (%) | 45.6 | 36.5 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 0.011 |
| ph/frq (deg) | 60.3 | 12.3 | Inc. seg. avg. | 0.264 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 0.00 |
| amp/frq (%) | 48.1 | 21.5 | Inc. frq. avg. | 0.308 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | |

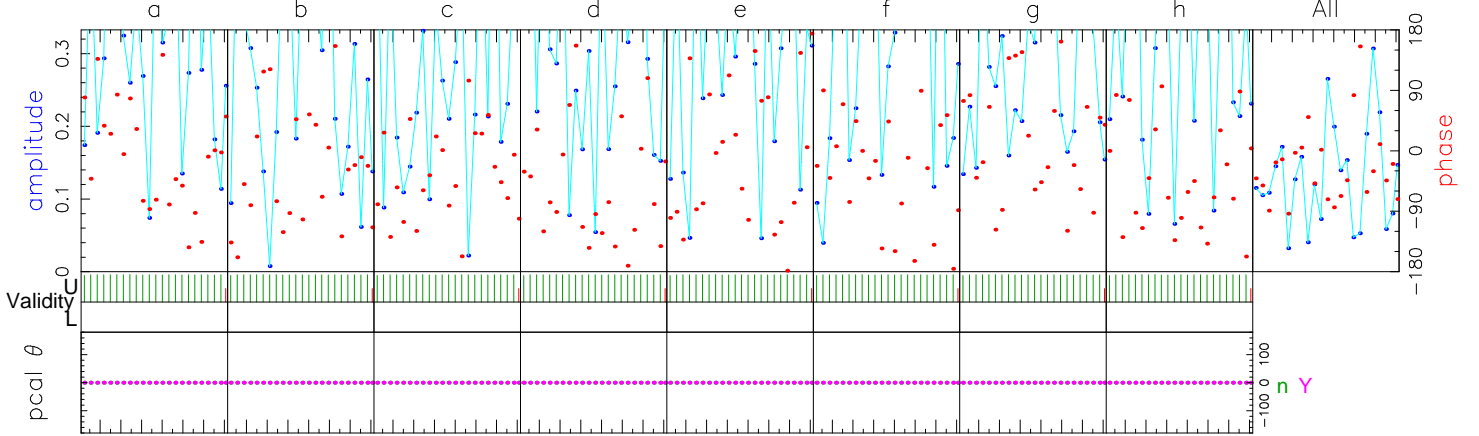
n: az 222.0 el 87.3 pa 44.3 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -6504.819 -4176.546 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nY.W.173.18UHQS



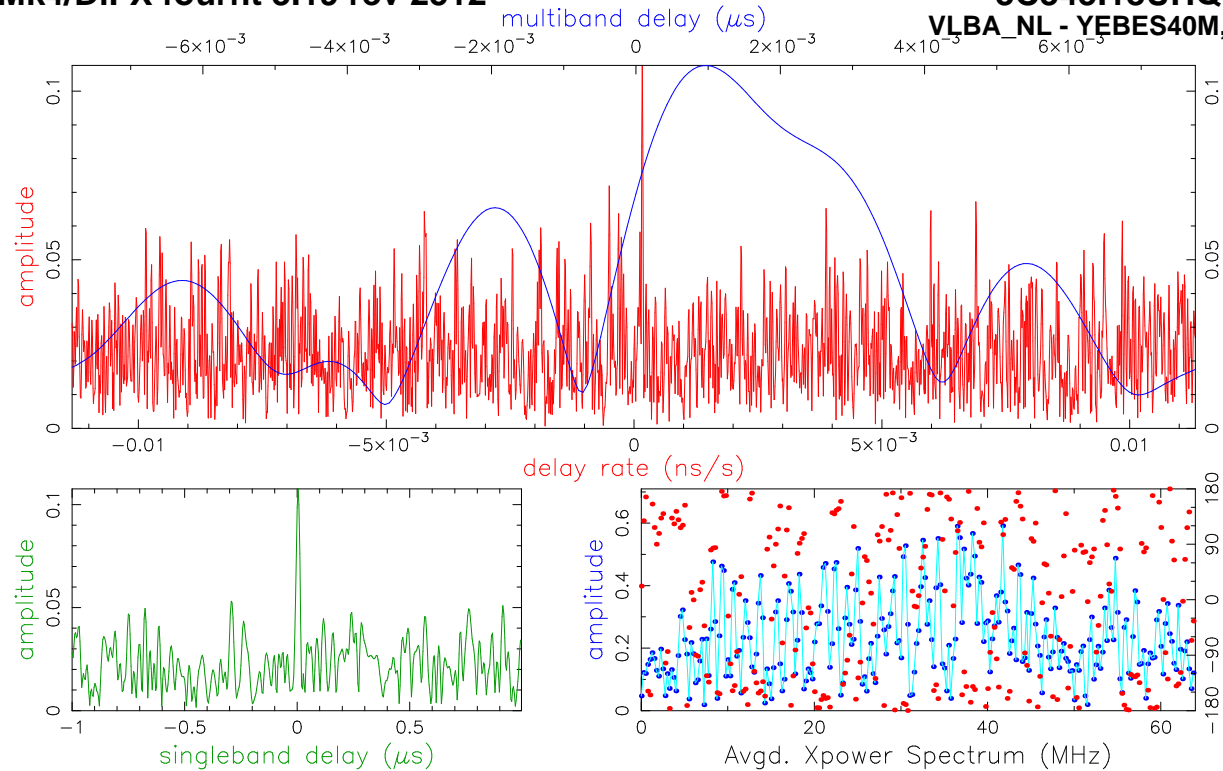
Fringe quality 0
 SNR 5.9
 Int time 409.947
 Amp 0.111
 Phase -38.3
 PFD 6.7e-01
 Delays (us)
 SBD 0.463855
 MBD 0.002316
 Fringe rate (Hz)
 0.323951
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084105.12
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143613
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



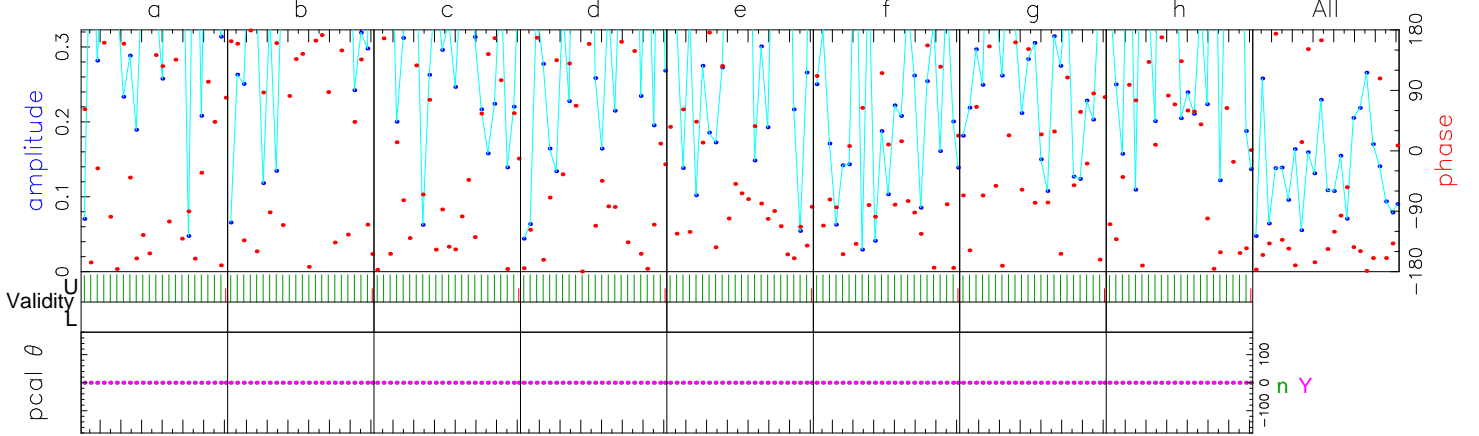
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -17.2 | -51.5 | -44.2 | -66.0 | -78.7 | 0.6 | -7.4 | -58.9 | Phase | -38.3 |
| | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Ampl. | 0.1 |
| | 412.7 | 285.6 | 123.6 | 165.9 | 442.9 | 144.4 | 52.8 | 39.7 | Sbd box | 375.7 |
| U/L | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| n:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 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) | 1.28536021963E+04 | | Apriori delay (usec) | | 1.28531311302E+04 | | Resid mbdelay (usec) | | 2.31612E-03 | +/- 1.8E-04 |
| Sband delay (usec) | 1.28535949849E+04 | | Apriori clock (usec) | | 2.0317902E+01 | | Resid sbdelay (usec) | | 4.63855E-01 | +/- 1.5E-03 |
| Phase delay (usec) | 1.28531311290E+04 | | Apriori clockrate (us/s) | | 1.1399998E-07 | | Resid phdelay (usec) | | -1.23479E-06 | +/- 6.3E-07 |
| Delay rate (us/s) | 8.53842983465E-01 | | Apriori rate (us/s) | | 8.53839222716E-01 | | Resid rate (us/s) | | 3.76075E-06 | +/- 2.6E-09 |
| Total phase (deg) | 161.6 | | Apriori accel (us/s/s) | | -6.70603846450E-05 | | Resid phase (deg) | | -38.3 | +/- 19.5 |

ph/seg (deg) 55.7 46.8 Amplitude 0.111 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.3 81.7 Search (2048X32) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.5 27.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.2 48.2 Inc. seg. avg. 0.104 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 n: az 222.0 el 87.3 pa 44.3 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -6504.819 -4176.546 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nY.W.186.18UHQS simultaneous interpolator



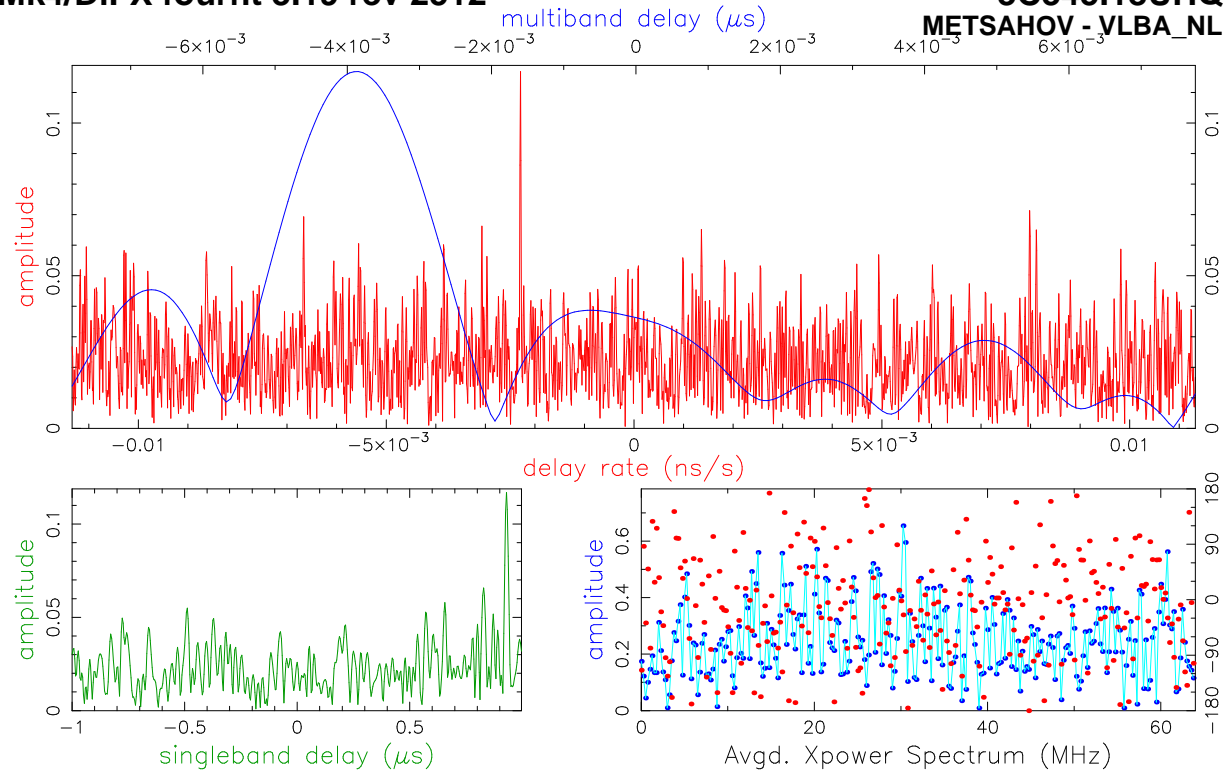
Fringe quality 0
 SNR 6.0
 Int time 409.947
 Amp 0.108
 Phase -160.2
 PFD 4.8e-01
 Delays (us)
 SBD 0.004097
 MBD 0.000971
 Fringe rate (Hz) 0.014350
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084105.12
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143617
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



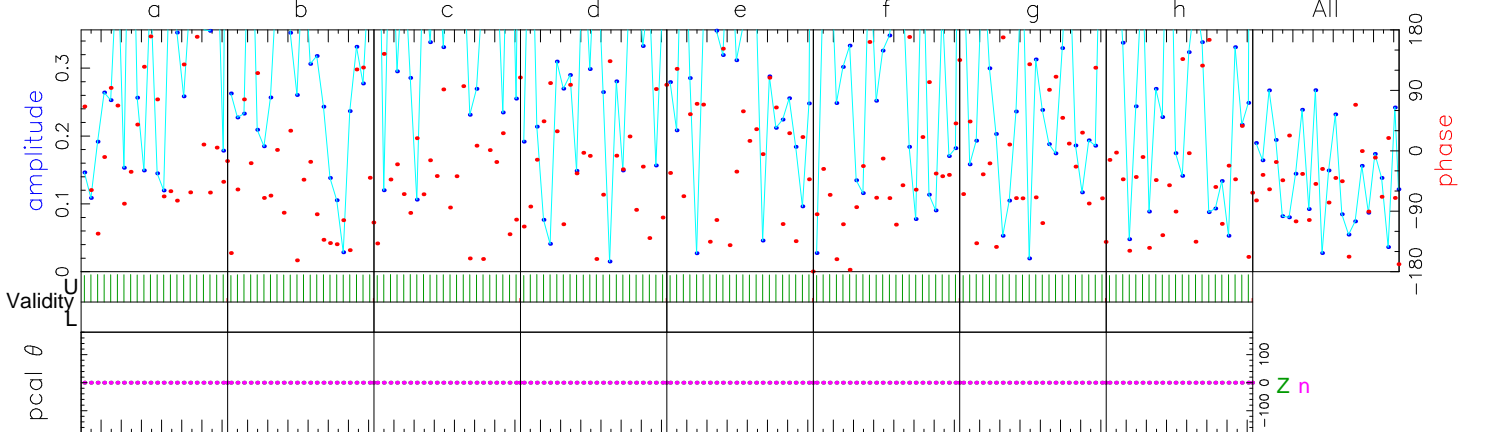
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|----------|-------------------|----------|----------|----------|-----------------------------|----------|----------|--------------|-------------|
| U/L | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | 810/0 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| n:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Y | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec)(sbd) | | 1.28531321007E+04 | | | | 1.28531311302E+04 | | | 9.70544E-04 | +/- 1.8E-04 |
| Sband delay (usec) | | 1.28531352267E+04 | | | | 2.0317902E+01 | | | 4.09650E-03 | +/- 1.4E-03 |
| Phase delay (usec) | | 1.28531311250E+04 | | | | 1.1399998E-07 | | | -5.16699E-06 | +/- 6.2E-07 |
| Delay rate (us/s) | | 8.53839389304E-01 | | | | 8.53839222716E-01 | | | 1.66588E-07 | +/- 2.6E-09 |
| Total phase (deg) | | | 39.6 | | | -6.70603846450E-05 | | | -160.2 | +/- 19.2 |
| 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 | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| 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) 58.6 46.1 Search (2048X32) 0.107 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.2 80.5 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.0 27.2 Inc. seg. avg. 0.106 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 62.5 47.5 Inc. frq. avg. 0.121 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 222.0 el 87.3 pa 44.3 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -6504.819 -4176.546 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/nY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/nY.W.200.18UHQS



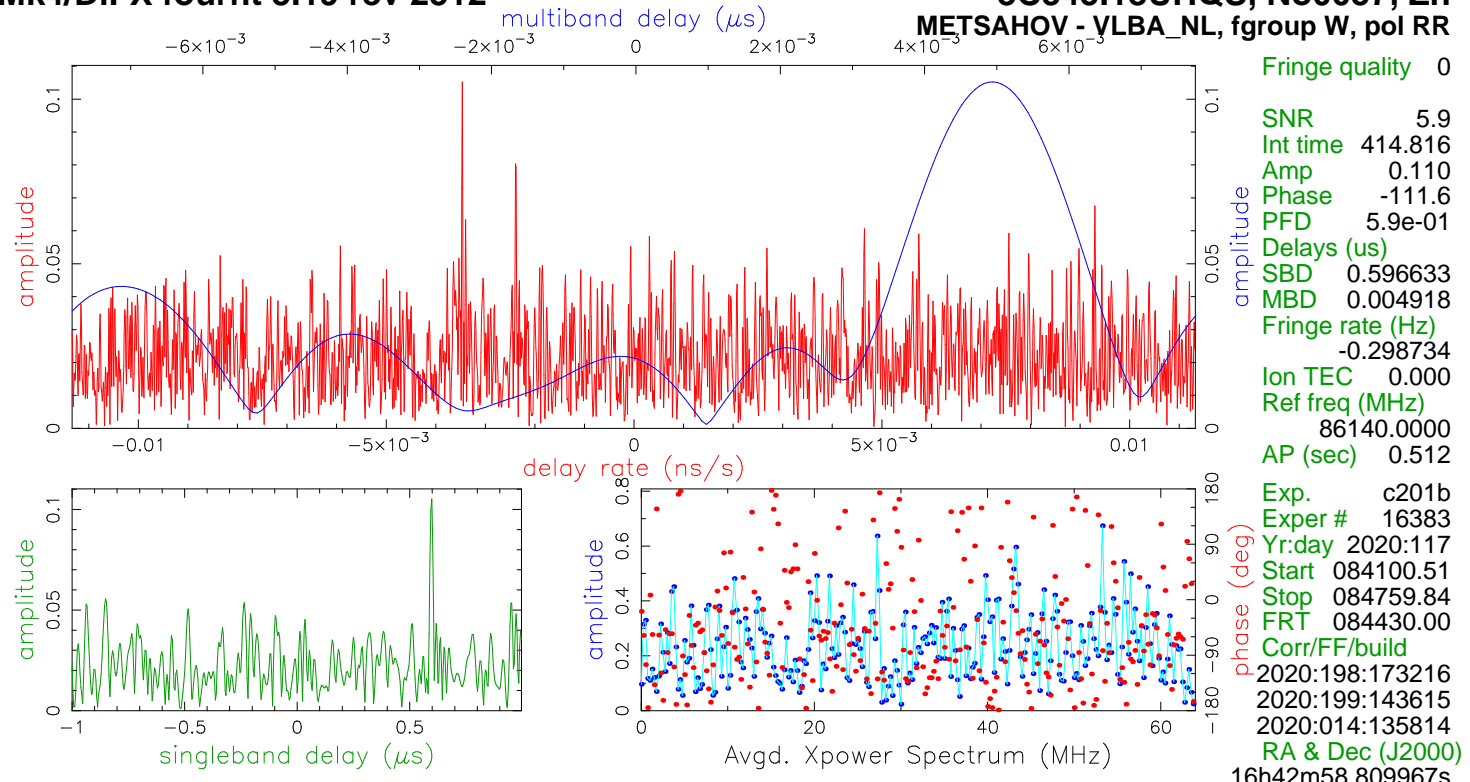
Fringe quality 0
 SNR 6.5
 Int time 414.817
 Amp 0.119
 Phase -48.5
 PFD 2.1e-02
 Delays (us)
 SBD 0.929814
 MBD -0.003869
 Fringe rate (Hz)
 -0.197661
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143611
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

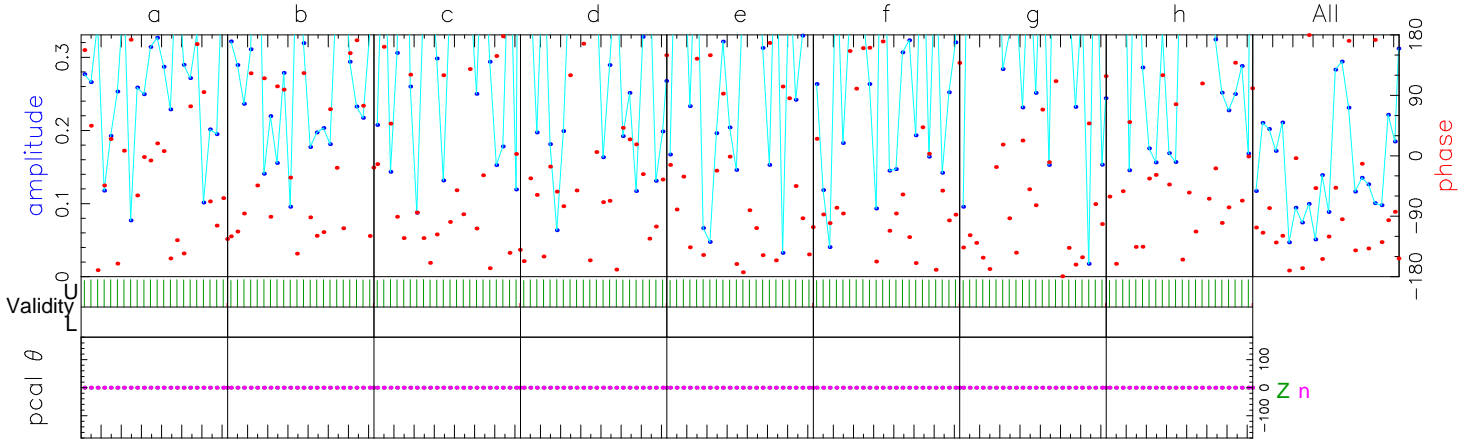


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -22.8 | -60.3 | -58.5 | -51.2 | -13.7 | -64.3 | -46.2 | -42.7 | Phase | -48.5 |
| | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Ampl. | 0.1 |
| | 77.7 | 269.2 | 457.4 | 431.0 | 386.4 | 88.2 | 496.7 | 174.2 | Sbd box | 495.0 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Z:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| Z:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Z | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -1.34786327930E+04 | | Apriori delay (usec) | | -1.34795664238E+04 | | Resid mbdelay (usec) | | -3.86919E-03 | +/- 1.7E-04 |
| Sband delay (usec) | -1.34786366103E+04 | | Apriori clock (usec) | | -3.2408356E+01 | | Resid sbdelay (usec) | | 9.29814E-01 | +/- 1.3E-03 |
| Phase delay (usec) | -1.34795664253E+04 | | Apriori clockrate (us/s) | | -3.1799997E-07 | | Resid phdelay (usec) | | -1.56443E-06 | +/- 5.7E-07 |
| Delay rate (us/s) | -4.63805479739E-01 | | Apriori rate (us/s) | | -4.63803185085E-01 | | Resid rate (us/s) | | -2.29465E-06 | +/- 2.3E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 8.60943518209E-05 | | Resid phase (deg) | | -48.5 | +/- 17.6 |

ph/seg (deg) 49.0 42.2 Search (2048X32) 0.114 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.8 73.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.0 24.9 Inc. seg. avg. 0.115 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.9 43.5 Inc. frq. avg. 0.112 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 313.1 el 22.0 pa 29.0 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) 3643.831 6951.451 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/Zn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Zn.W.177.18UHQS

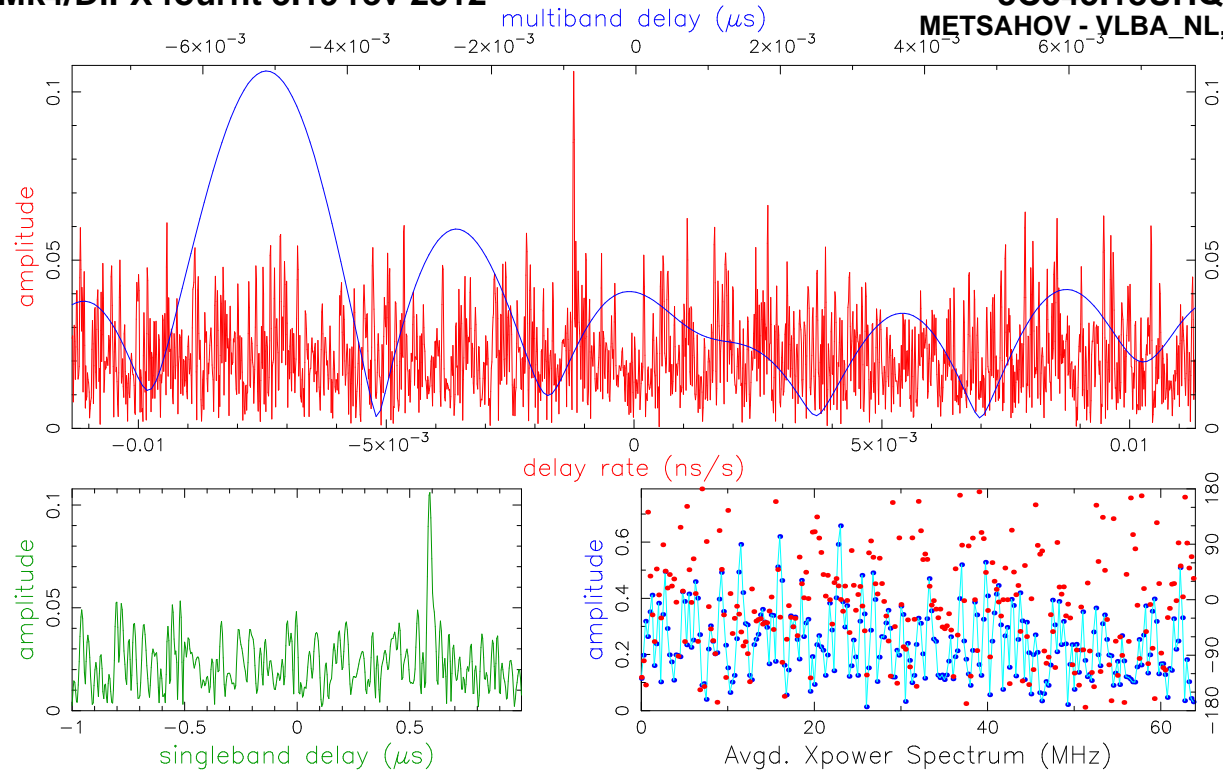


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



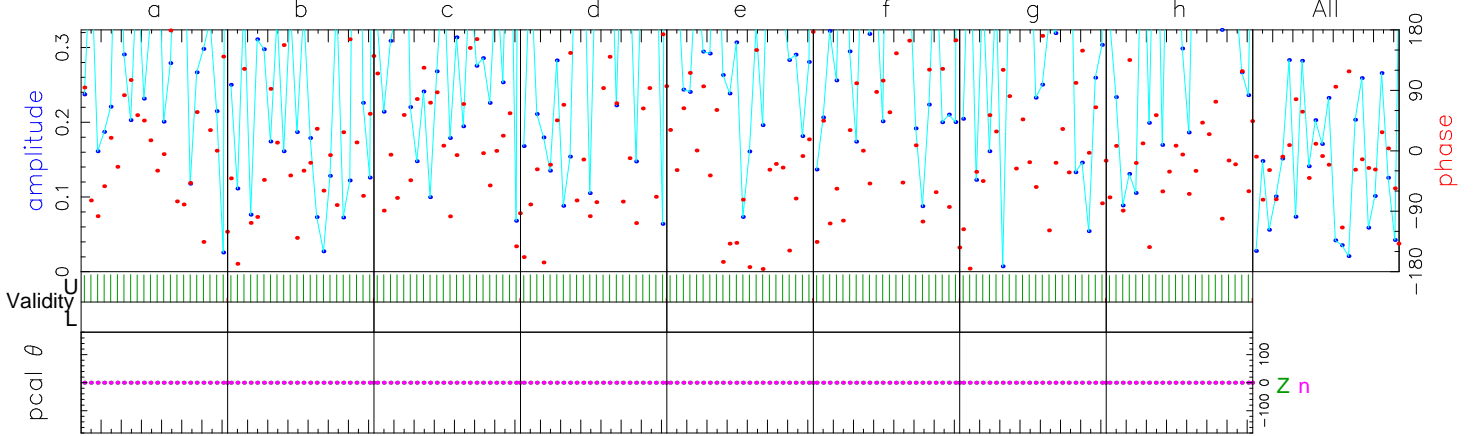
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|--------------------|----------------------|--------------|----------|----------|------------|--------|
| | -70.5 | -120.5 | -120.9 | -96.2 | -119.3 | -145.0 | -119.8 | -86.7 | Phase | -111.6 |
| | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Ampl. | 0.1 |
| | 67.0 | 375.9 | 233.4 | 88.0 | 201.9 | 363.5 | 256.9 | 197.4 | Sbd box | 409.7 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Z:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| Z:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Z | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -1.34789677554E+04 | | Apriori delay (usec) | -1.34795664238E+04 | Resid mbdelay (usec) | 4.91836E-03 | +/- | 1.8E-04 | | |
| Sband delay (usec) | -1.34789697905E+04 | | Apriori clock (usec) | -3.2408356E+01 | Resid sbdelay (usec) | 5.96633E-01 | +/- | 1.5E-03 | | |
| Phase delay (usec) | -1.34795664274E+04 | | Apriori clockrate (us/s) | -3.1799997E-07 | Resid phdelay (usec) | -3.60022E-06 | +/- | 6.3E-07 | | |
| Delay rate (us/s) | -4.63806653093E-01 | | Apriori rate (us/s) | -4.63803185085E-01 | Resid rate (us/s) | -3.46801E-06 | +/- | 2.6E-09 | | |
| Total phase (deg) | | -19.0 | Apriori accel (us/s/s) | 8.60943518209E-05 | Resid phase (deg) | -111.6 | +/- | 19.4 | | |

| | RMS | Theor. | Amplitude | 0.110 +/- 0.019 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -1.000 | 1.000 |
|--------------|------|--------|------------------|-----------------|--|------------------------------|------------------|--------|-------|
| ph/seg (deg) | 51.9 | 46.5 | Search (2048X32) | 0.102 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 | 0.008 |
| amp/seg (%) | 78.7 | 81.2 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 | 0.011 |
| ph/frq (deg) | 25.7 | 27.4 | Inc. seg. avg. | 0.118 | Sample rate(MISamp/s): 128 | | ion window (TEC) | 0.00 | 0.00 |
| amp/frq (%) | 36.0 | 47.9 | Inc. frq. avg. | 0.104 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | | | |



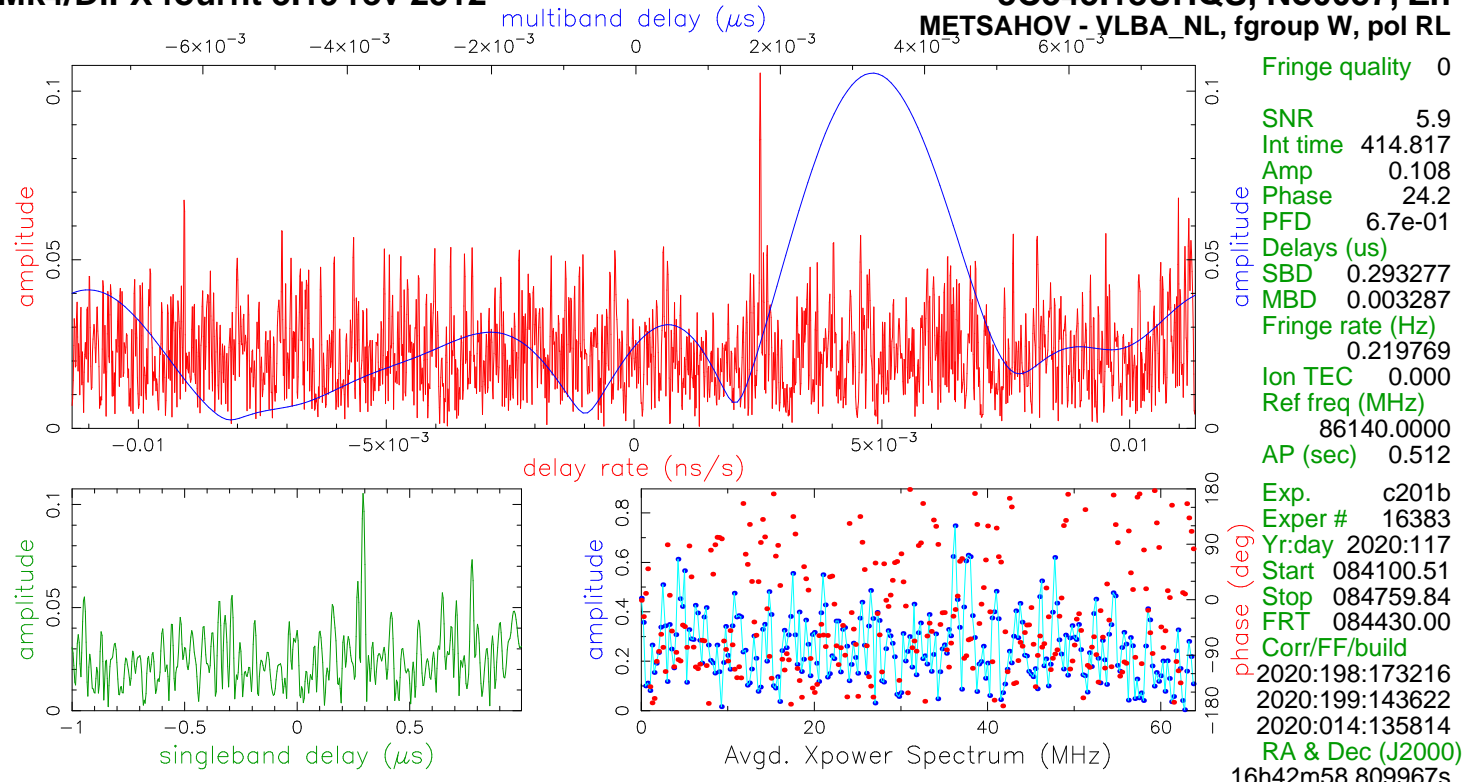
Fringe quality 0
 SNR 6.0
 Int time 414.816
 Amp 0.108
 Phase -5.7
 PFD 4.4e-01
 Delays (us)
 SBD 0.588225
 MBD -0.005163
 Fringe rate (Hz)
 -0.105508
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201b
 Exper # 16383
 Yr:day 2020:117
 Start 084100.51
 Stop 084759.84
 FRT 084430.00
 Corr/FF/build
 2020:198:173216
 2020:199:143618
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

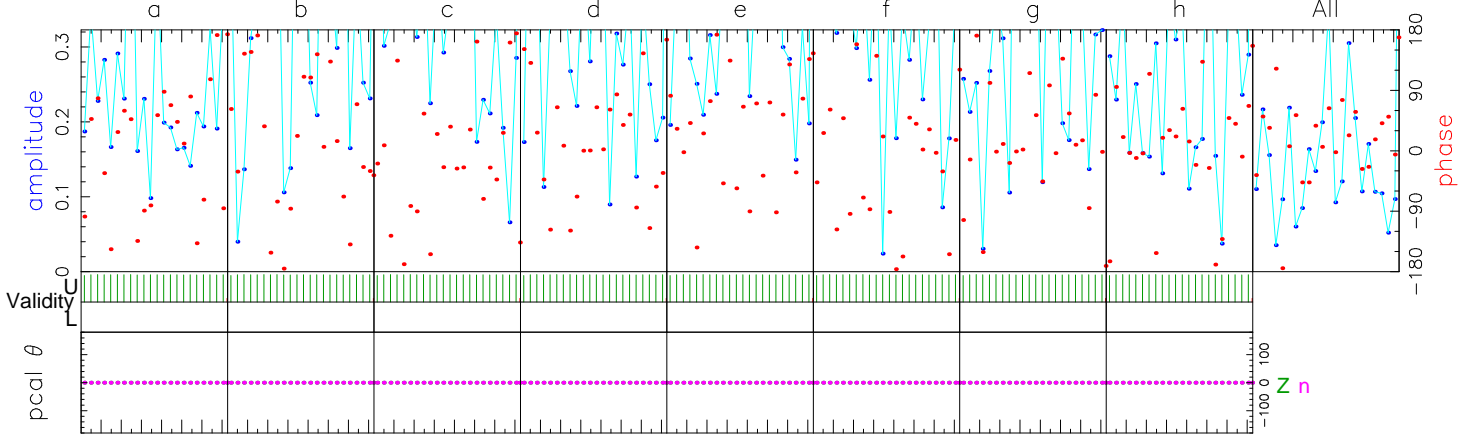


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -18.9 | -21.7 | 29.6 | -17.9 | -6.9 | -11.5 | -10.6 | -1.4 | Phase | -5.7 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | Ampl. | 0.1 |
| | 58.2 | 368.7 | 429.5 | 474.9 | 405.9 | 242.9 | 41.8 | 406.8 | Sbd box | 407.6 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Z:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| Z:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Z | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -1.34789778372E+04 | | Apriori delay (usec) | | -1.34795664238E+04 | | Resid mbdelay (usec) | | -5.16341E-03 | +/- 1.8E-04 |
| Sband delay (usec) | -1.34789781985E+04 | | Apriori clock (usec) | | -3.2408356E+01 | | Resid sbdelay (usec) | | 5.88225E-01 | +/- 1.4E-03 |
| Phase delay (usec) | -1.34795664239E+04 | | Apriori clockrate (us/s) | | -3.1799997E-07 | | Resid phdelay (usec) | | -1.83984E-07 | +/- 6.2E-07 |
| Delay rate (us/s) | -4.63804409929E-01 | | Apriori rate (us/s) | | -4.63803185085E-01 | | Resid rate (us/s) | | -1.22484E-06 | +/- 2.6E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 8.60943518209E-05 | | Resid phase (deg) | | -5.7 | +/- 19.2 |

ph/seg (deg) 55.1 45.9 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 87.5 80.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.8 27.1 Inc. seg. avg. 0.106 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.2 47.3 Inc. frq. avg. 0.100 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 313.1 el 22.0 pa 29.0 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) 3643.831 6951.451 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0057/Zn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Zn.W.206.18UHQS



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------------------------|--------------------|----------|--------------------------|--------------------|----------------------|-------------|----------|----------|------------|-------|
| 39.2 | 39.0 | -14.5 | 33.4 | 42.9 | -12.7 | 26.7 | 31.0 | 31.0 | Phase | 24.2 |
| 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | Ampl. | 0.1 |
| 503.9 | 126.4 | 451.2 | 395.5 | 244.9 | 247.8 | 330.5 | 355.8 | 355.8 | Sbd box | 332.1 |
| U/L | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | 819/0 | APs used | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Z:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| Z:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Z | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | -1.34792662614E+04 | | Apriori delay (usec) | -1.34795664238E+04 | Resid mbdelay (usec) | 3.28741E-03 | +/- | 1.8E-04 | | |
| Sband delay (usec) | -1.34792731468E+04 | | Apriori clock (usec) | -3.2408356E+01 | Resid sbdelay (usec) | 2.93277E-01 | +/- | 1.5E-03 | | |
| Phase delay (usec) | -1.34795664230E+04 | | Apriori clockrate (us/s) | -3.1799997E-07 | Resid phdelay (usec) | 7.80842E-07 | +/- | 6.3E-07 | | |
| Delay rate (us/s) | -4.63800633788E-01 | | Apriori rate (us/s) | -4.63803185085E-01 | Resid rate (us/s) | 2.55130E-06 | +/- | 2.6E-09 | | |
| Total phase (deg) | | -243.2 | Apriori accel (us/s/s) | 8.60943518209E-05 | Resid phase (deg) | 24.2 | +/- | 19.5 | | |

| | RMS | Theor. | Amplitude | 0.108 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | | | |
|--------------|------|--------|------------------|-----------------|--|-----------------------|-------------------|------------------|-------|------|
| ph/seg (deg) | 55.2 | 46.8 | Search (2048X32) | 0.099 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -1.000 | 1.000 | | |
| amp/seg (%) | 88.7 | 81.7 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 | |
| ph/frq (deg) | 25.1 | 27.6 | Inc. seg. avg. | 0.113 | Sample rate(MISamp/s): 128 | | dr window (ns/s) | -0.011 | 0.011 | |
| amp/frq (%) | 28.8 | 48.2 | Inc. frq. avg. | 0.103 | Data rate(Mb/s): 2048 | nlags: 256 | t_cohere infinite | ion window (TEC) | 0.00 | 0.00 |