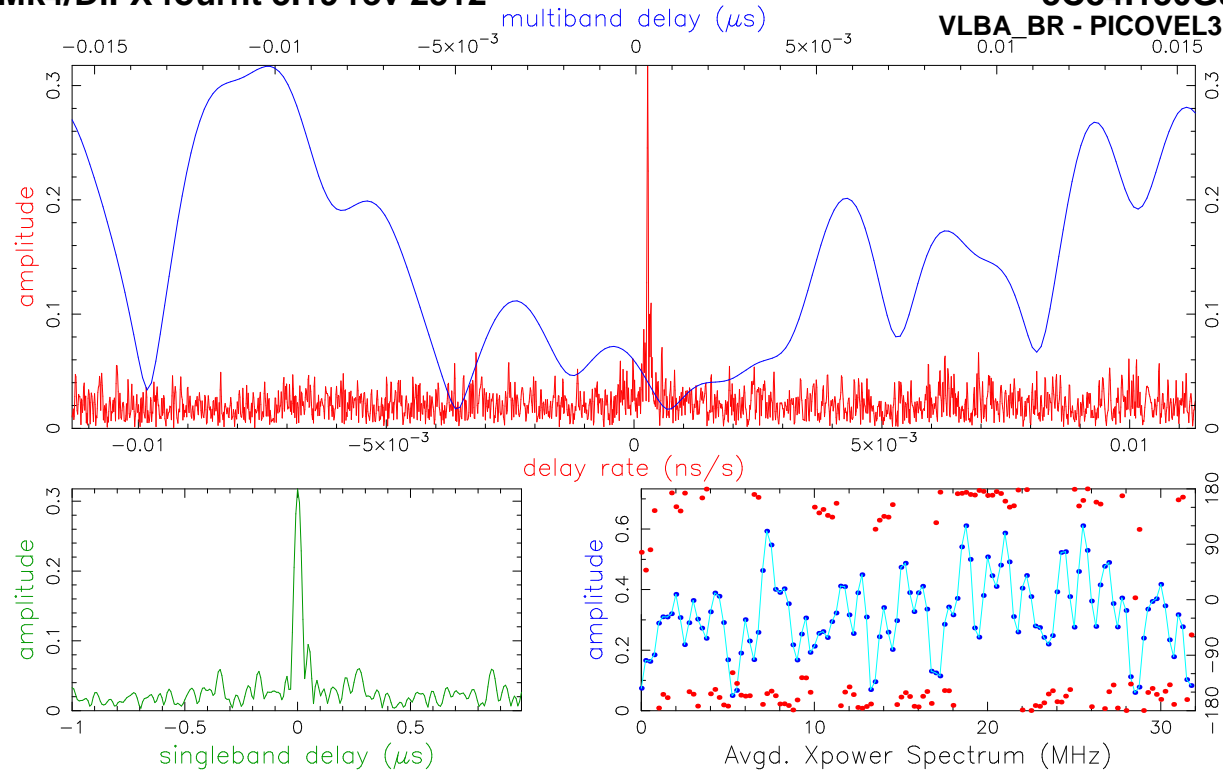


Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, bi
VLBA_BR - PICOVEL3, fgroup W, pol LL

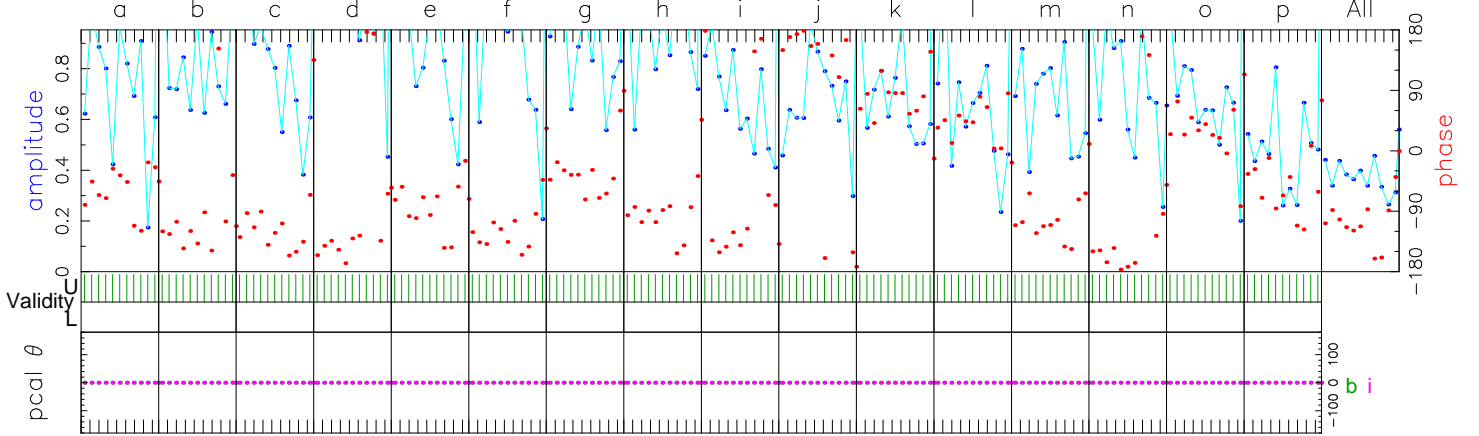


Fringe quality 8

SNR 19.0
Int time 479.001
Amp 0.318
Phase -109.2
PFD 0.0e+00
Delays (us)
SBD 0.001228
MBD -0.010187
Fringe rate (Hz) 0.023881
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112250
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------------------------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|--------------------|----------|----------|----------|----------|----------|----------|------------|---|
| | -61.8 | -121.0 | -118.2 | -147.1 | -79.4 | -123.7 | -37.2 | -100.1 | -143.6 | 163.4 | 80.7 | 46.6 | -108.3 | -163.8 | 33.1 | -57.1 | | Phase -109.2 |
| | 0.6 | 0.7 | 0.7 | 0.9 | 0.7 | 0.8 | 0.8 | 0.8 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 | 0.4 | | Ampl. 0.7 |
| | 127.9 | 129.5 | 129.7 | 129.3 | 128.9 | 129.2 | 129.0 | 129.0 | 129.0 | 129.0 | 129.2 | 129.4 | 129.0 | 129.0 | 129.1 | 128.8 | | Sbd box 129.2 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC phase |
| b:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks |
| | | | | | | | | | | | | | | | | | | Chan ids |
| | | | | | | | | | | | | | | | | | | Tracks |
| Group delay (usec)(sbd) | | 1.33303971788E+04 | | | | | | | | 1.33304073662E+04 | | | | | | | | Resid mbdelay (usec) -1.01873E-02 +/- 5.7E-05 |
| Sband delay (usec) | | 1.33304085942E+04 | | | | | | | | -9.0395465E-02 | | | | | | | | Resid sbdelay (usec) 1.22800E-03 +/- 9.1E-04 |
| Phase delay (usec) | | 1.33304073626E+04 | | | | | | | | 1.1060491E-07 | | | | | | | | Resid phdelay (usec) -3.52257E-06 +/- 1.9E-07 |
| Delay rate (us/s) | | 1.19042796166E+00 | | | | | | | | 1.19042768442E+00 | | | | | | | | Resid rate (us/s) 2.77237E-07 +/- 7.0E-10 |
| Total phase (deg) | | | | 78.1 | | | | | | -6.02686165011E-05 | | | | | | | | Resid phase (deg) -109.2 +/- 6.0 |

ph/seg (deg) 32.8 10.4
amp/seg (%) 24.6 18.2
ph/frq (deg) 83.8 12.1
amp/frq (%) 117.6 21.0

RMS Theor. Amplitude 0.318 +/- 0.017
Search (2048X64) 0.315
Interp. 0.000
Inc. seg. avg. 0.365
Inc. frq. avg. 0.654

Group delay (usec)(sbd) 1.33303971788E+04
Sband delay (usec) 1.33304085942E+04
Phase delay (usec) 1.33304073626E+04
Delay rate (us/s) 1.19042796166E+00
Total phase (deg) 78.1

Apriori delay (usec) 1.33304073662E+04
Apriori clock (usec) -9.0395465E-02
Apriori clockrate (us/s) 1.1060491E-07
Apriori rate (us/s) 1.19042768442E+00
Apriori accel (us/s/s) -6.02686165011E-05

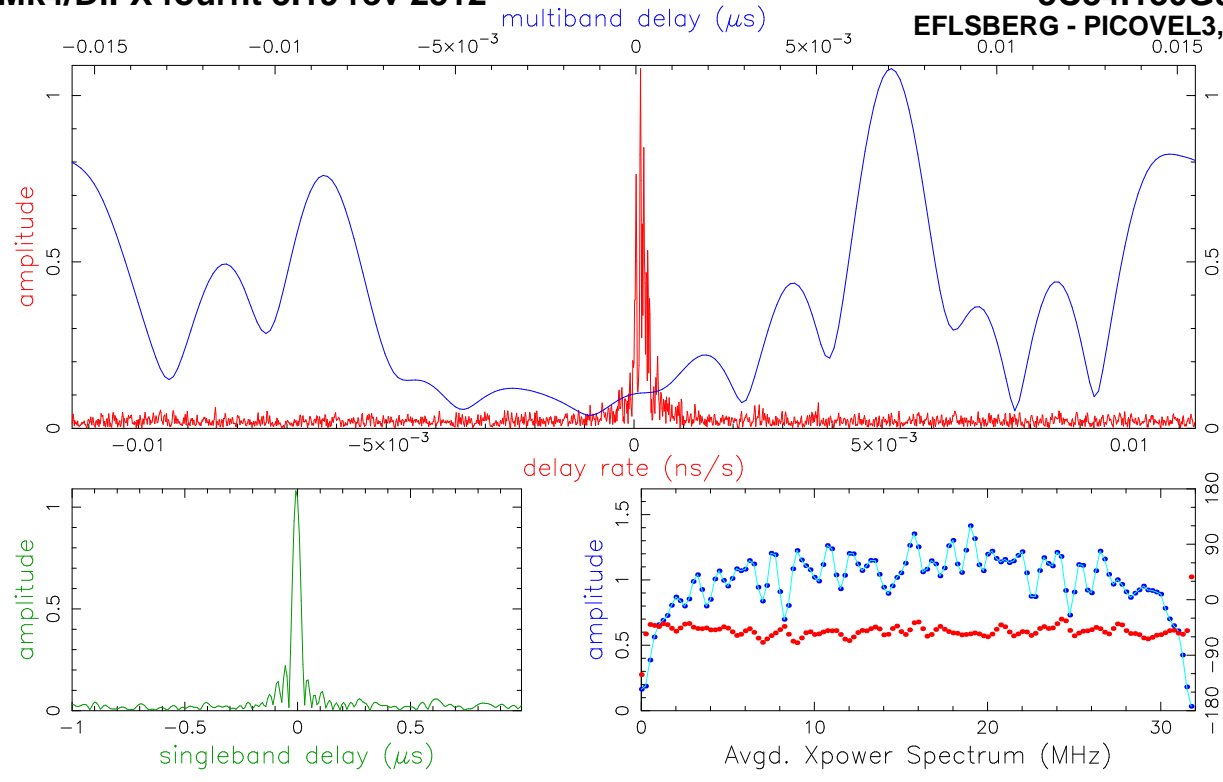
Resid mbdelay (usec) -1.01873E-02 +/- 5.7E-05
Resid sbdelay (usec) 1.22800E-03 +/- 9.1E-04
Resid phdelay (usec) -3.52257E-06 +/- 1.9E-07
Resid rate (us/s) 2.77237E-07 +/- 7.0E-10
Resid phase (deg) -109.2 +/- 6.0

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): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

b: az 105.8 el 73.7 pa -58.9 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -9216.026 -3171.907 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bi..130G9L Output file: /Exps/c192b/v2/1234/No0205/bi.W.10.130G9L

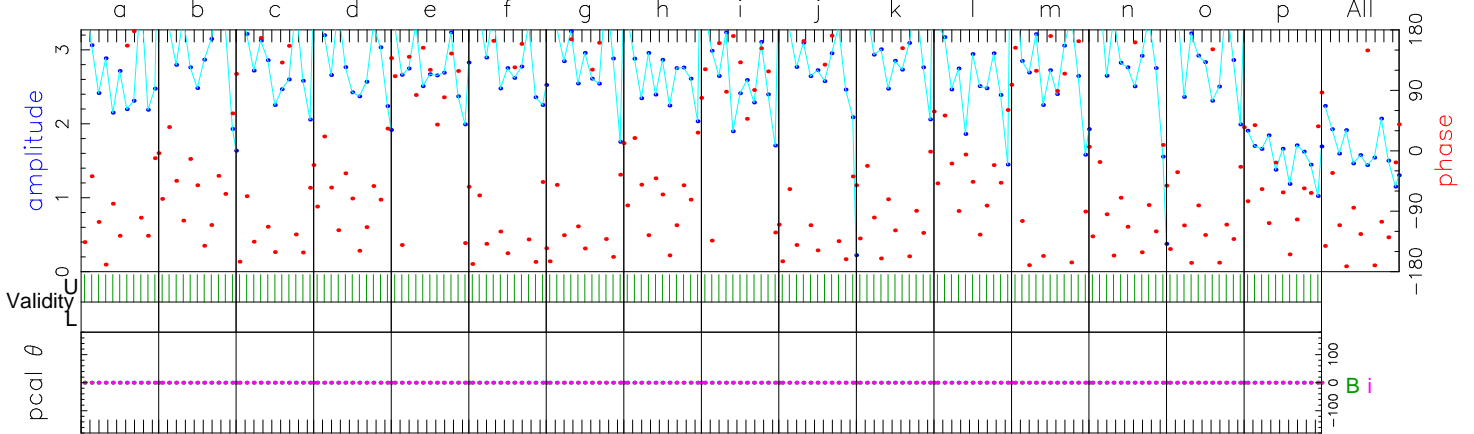


Fringe quality 1

SNR 65.3
Int time 479.574
Amp 1.090
Phase -123.0
PFD 0.0e+00
Delays (us)
SBD -0.005342
MBD 0.007076
Fringe rate (Hz) 0.011180
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112254
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

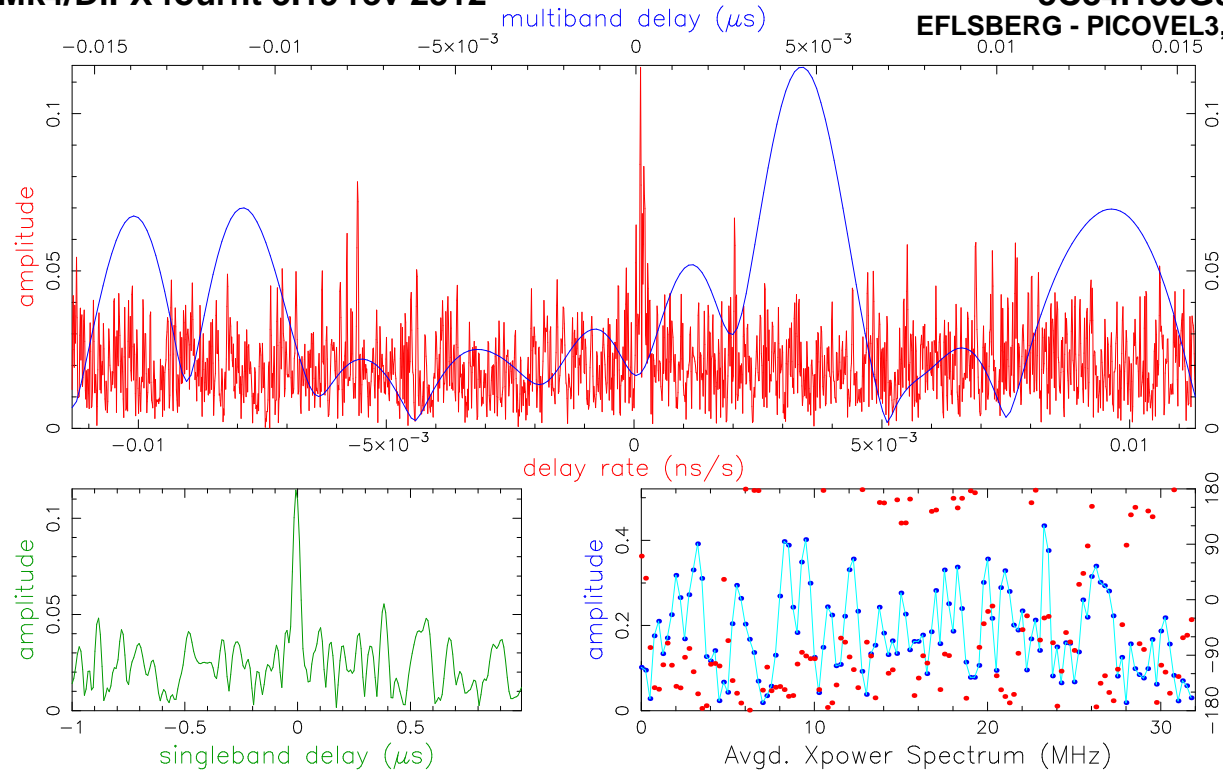


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|----------|--------------------------|----------|----------|-------------------|----------|----------|----------------------|----------|----------|--------------|----------|----------|-------------|------------|--------|
| | -117.5 | -57.7 | -145.9 | -67.4 | 123.7 | -152.2 | -147.5 | -67.8 | 133.9 | -149.4 | -112.2 | -39.4 | 167.6 | -108.0 | -121.6 | -62.3 | Phase | -123.0 |
| | 1.7 | 2.0 | 1.9 | 1.9 | 1.8 | 1.9 | 1.8 | 1.9 | 1.7 | 1.9 | 1.9 | 1.7 | 1.9 | 1.9 | 1.9 | 1.0 | Ampl. | 1.8 |
| | 128.9 | 128.9 | 129.0 | 128.7 | 128.9 | 128.8 | 128.9 | 128.9 | 128.9 | 128.9 | 128.9 | 128.8 | 128.9 | 128.9 | 128.7 | 128.6 | Sbd box | 128.3 |
| U/L | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | APs used | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| B:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| B:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | |
| | | | | | | | | | | | | | | | | | Chan ids | |
| | | | | | | | | | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 8.90310802546E+02 | | | Apriori delay (usec) | | | 8.90303726820E+02 | | | Resid mbdelay (usec) | | | 7.07573E-03 | | | +/- 1.7E-05 | | |
| Sband delay (usec) | 8.90298384320E+02 | | | Apriori clock (usec) | | | 1.7345242E+01 | | | Resid sbdelay (usec) | | | -5.34250E-03 | | | +/- 2.6E-04 | | |
| Phase delay (usec) | 8.90303722855E+02 | | | Apriori clockrate (us/s) | | | 1.5299999E-07 | | | Resid phdelay (usec) | | | -3.96528E-06 | | | +/- 5.7E-08 | | |
| Delay rate (us/s) | 2.12961503403E-01 | | | Apriori rate (us/s) | | | 2.12961373612E-01 | | | Resid rate (us/s) | | | 1.29791E-07 | | | +/- 2.0E-10 | | |
| Total phase (deg) | -112.8 | | | Apriori accel (us/s/s) | | | 8.01769847722E-06 | | | Resid phase (deg) | | | -123.0 | | | +/- 1.8 | | |

ph/seg (deg) RMS Theor. Amplitude 1.090 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.6 5.3 Search (2048X64) 1.029 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.2 3.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 67.8 6.1 Inc. seg. avg. 1.673 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 1.793 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

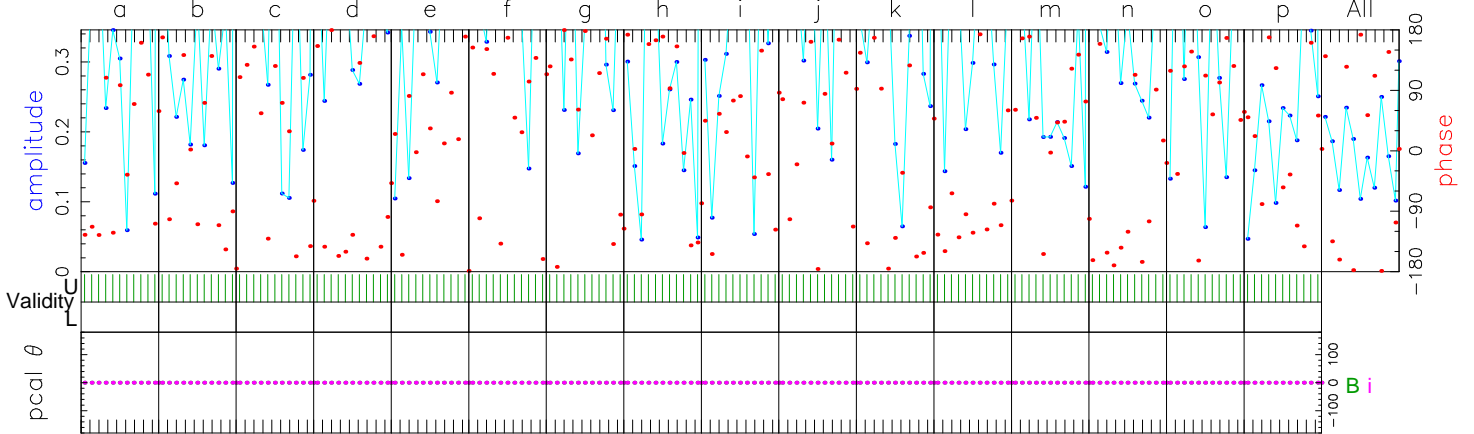
B: az 308.6 el 22.7 pa 41.3 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -1618.828 1694.740 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bi.W.24.130G9L



Fringe quality 0
SNR 6.9
Int time 479.574
Amp 0.115
Phase 161.6
PFD 1.5e-03
Delays (us)
SBD -0.005877
MBD 0.004642
Fringe rate (Hz)
0.011250
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112259
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

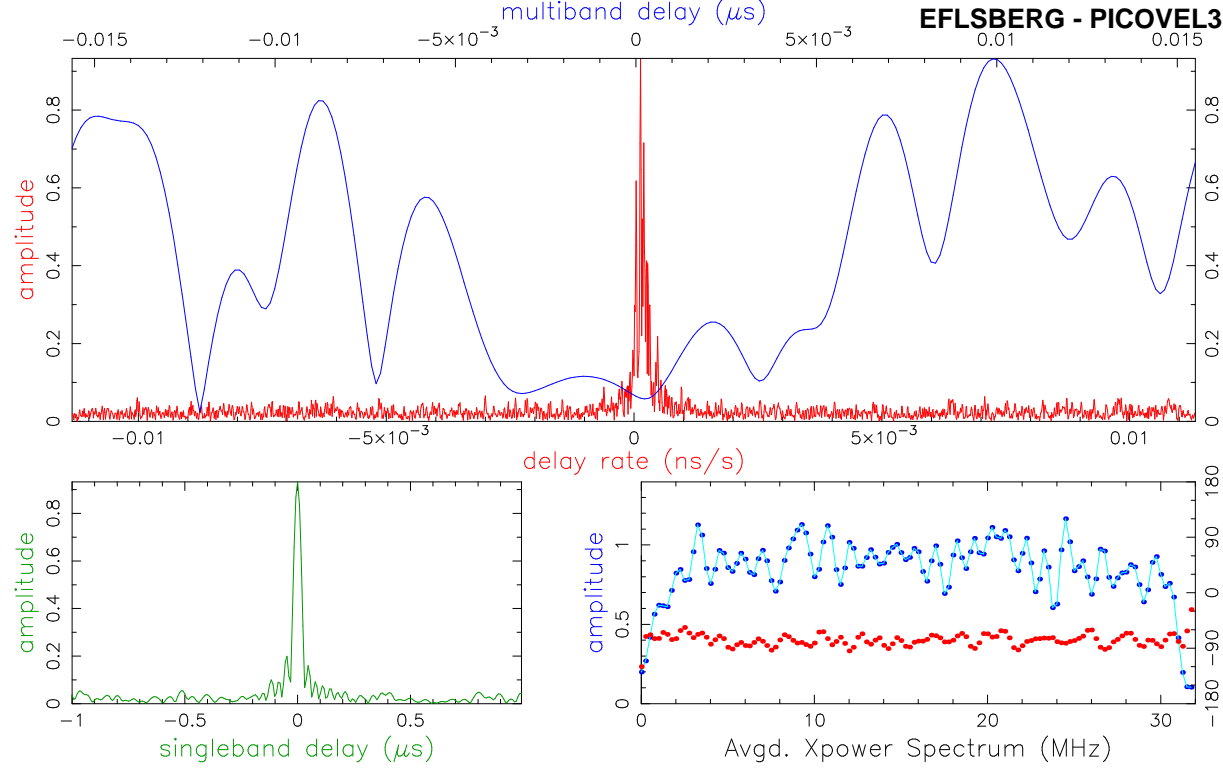


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| 170.2 | -150.6 | 138.3 | -164.2 | 51.7 | 150.9 | 146.6 | 162.6 | 46.7 | 141.0 | 179.1 | -117.1 | 94.7 | -174.0 | 101.8 | -114.2 | Phase | 161.6 | |
| 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | Ampl. | 0.1 | |
| 139.7 | 110.5 | 128.8 | 128.3 | 241.8 | 5.7 | 127.2 | 129.0 | 17.6 | 15.9 | 128.6 | 18.5 | 39.1 | 56.2 | 185.2 | 52.1 | Sbd box | 128.2 | |
| U/L | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | APs used | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | |
| B:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | |

Group delay (usec)(sbd) 8.90308369077E+02 Apriori delay (usec) 8.90303726820E+02 Resid mbdelay (usec) 4.64226E-03 +/- 1.6E-04
Sband delay (usec) 8.90297849820E+02 Apriori clock (usec) 1.7345242E+01 Resid sbdelay (usec) -5.87700E-03 +/- 2.5E-03
Phase delay (usec) 8.90303732032E+02 Apriori clockrate (us/s) 1.5299999E-07 Resid phdelay (usec) 5.21174E-06 +/- 5.4E-07
Delay rate (us/s) 2.12961504213E-01 Apriori rate (us/s) 2.12961373612E-01 Resid rate (us/s) 1.30601E-07 +/- 1.9E-09
Total phase (deg) 171.8 Apriori accel (us/s/s) 8.01769847722E-06 Resid phase (deg) 161.6 +/- 16.6

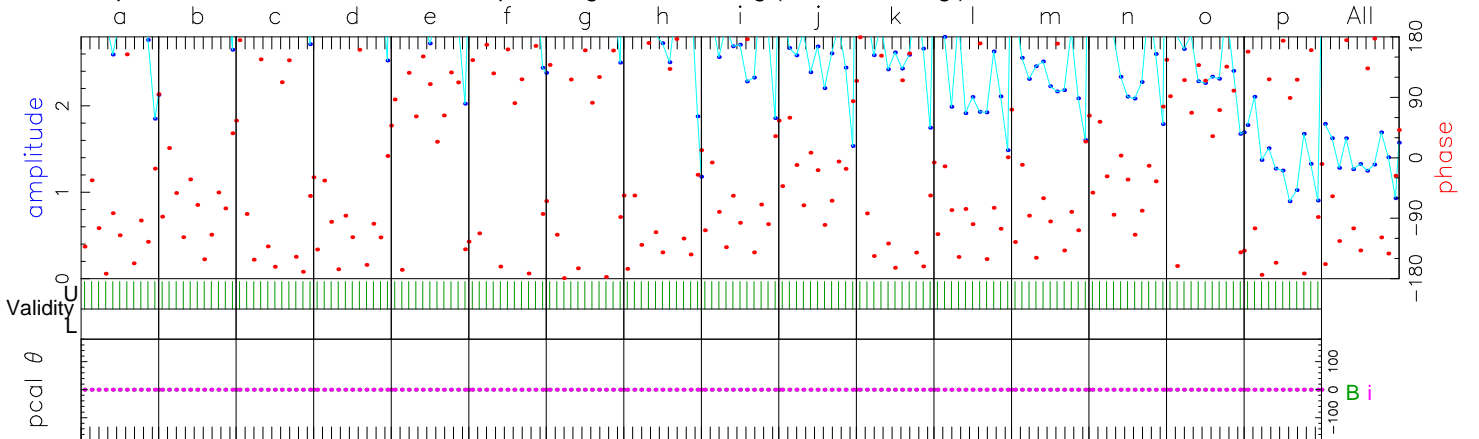
RMS Theor. Amplitude 0.115 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 53.5 28.7 Search (2048X64) 0.112 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 64.0 50.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 61.4 33.2 Inc. seg. avg. 0.150 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 72.9 57.9 Inc. frq. avg. 0.146 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 308.6 el 22.7 pa 41.3 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -1618.828 1694.740 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bi.W.43.130G9L



Fringe quality 1
SNR 55.9
Int time 479.574
Amp 0.933
Phase -138.3
PFD 0.0e+00
Delays (us)
SBD -0.000727
MBD 0.009916
Fringe rate (Hz) 0.011119
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112249
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

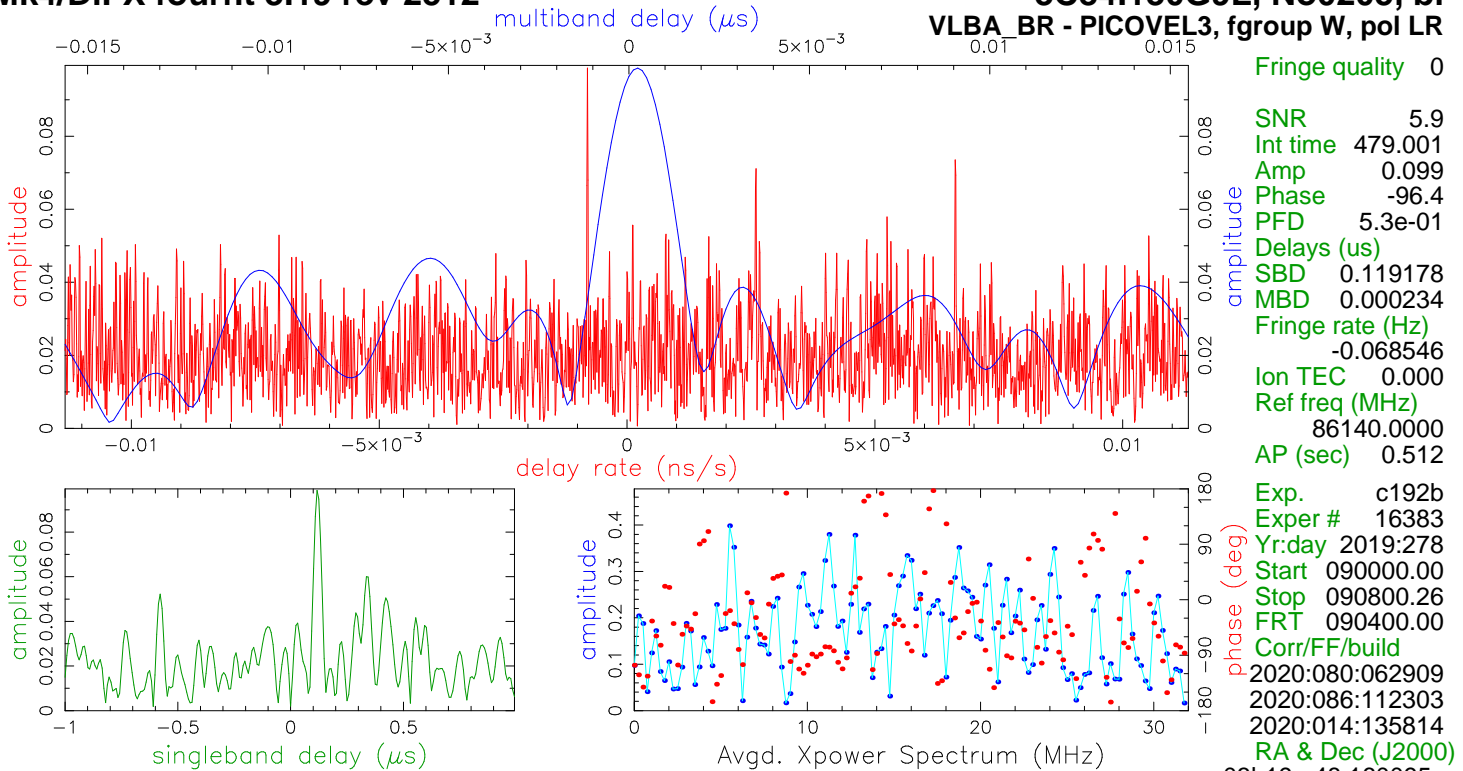


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|----------|--------------------------|----------|----------|-------------------|----------|----------|----------------------|----------|----------|--------------|----------|----------|----------|------------|-----|
| U/L | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | | |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| B:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| B | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| Group delay (usec)(sbd) | 8.90313642327E+02 | | | Apriori delay (usec) | | | 8.90303726820E+02 | | | Resid mbdelay (usec) | | | 9.91551E-03 | | | +/- | 1.9E-05 | |
| Sband delay (usec) | 8.90302999820E+02 | | | Apriori clock (usec) | | | 1.7345242E+01 | | | Resid sbdelay (usec) | | | -7.27000E-04 | | | +/- | 3.1E-04 | |
| Phase delay (usec) | 8.90303722361E+02 | | | Apriori clockrate (us/s) | | | 1.5299999E-07 | | | Resid phdelay (usec) | | | -4.45899E-06 | | | +/- | 6.6E-08 | |
| Delay rate (us/s) | 2.12961502697E-01 | | | Apriori rate (us/s) | | | 2.12961373612E-01 | | | Resid rate (us/s) | | | 1.29085E-07 | | | +/- | 2.4E-10 | |
| Total phase (deg) | -128.1 | | | Apriori accel (us/s/s) | | | 8.01769847722E-06 | | | Resid phase (deg) | | | -138.3 | | | +/- | 2.1 | |

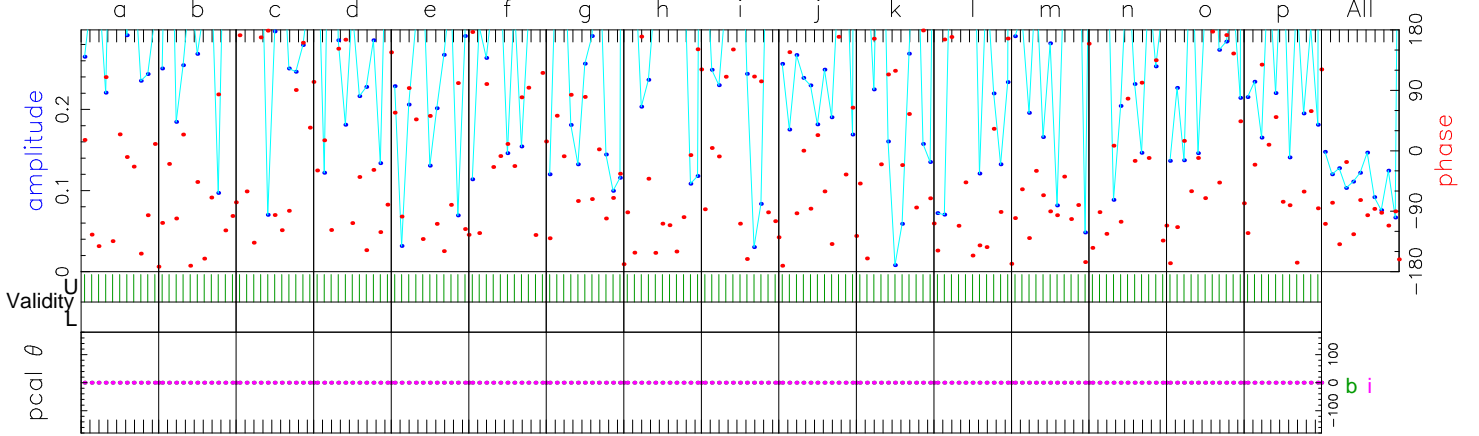
ph/seg (deg) 55.4 3.6 Search (2048X64) 0.889 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.3 6.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 71.0 4.1 Inc. seg. avg. 1.408 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 116.9 7.2 Inc. frq. avg. 1.934 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
B: az 308.6 el 22.7 pa 41.3 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -1618.828 1694.740 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bi.W.5.130G9L simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, bi
VLBA_BR - PICOVEL3, fgroup W, pol LR

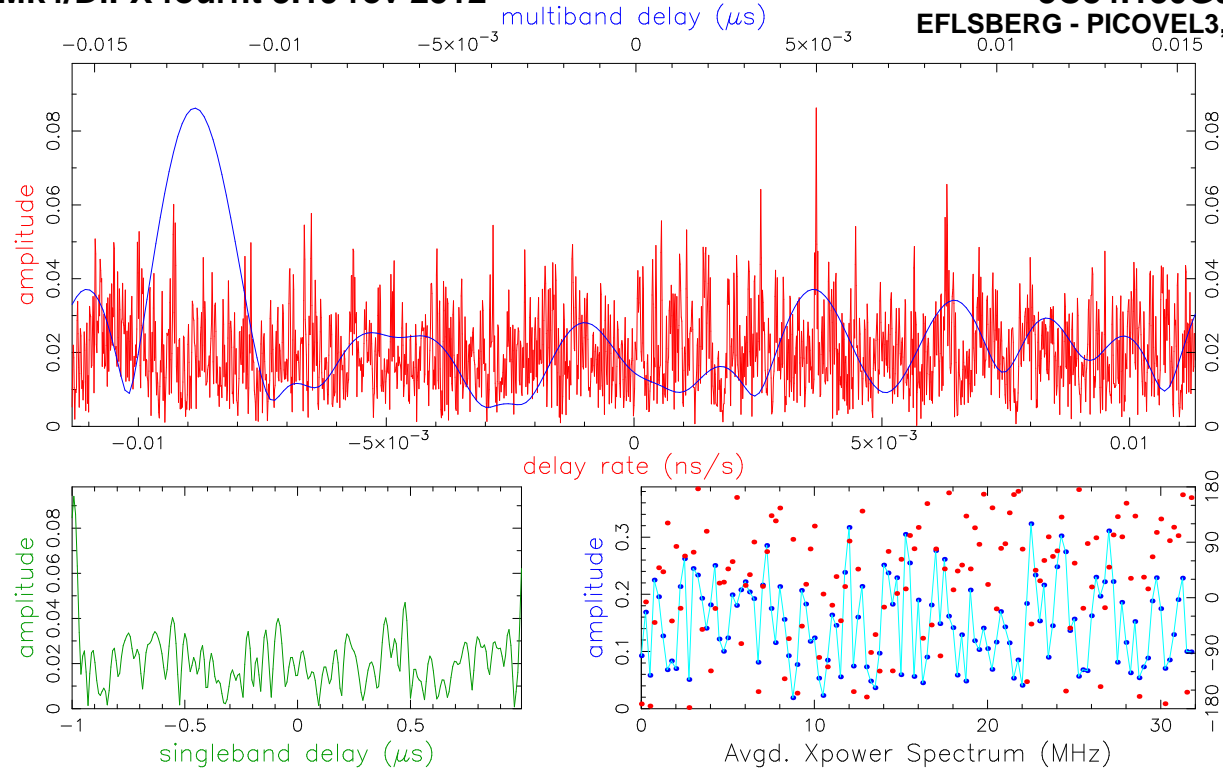


Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



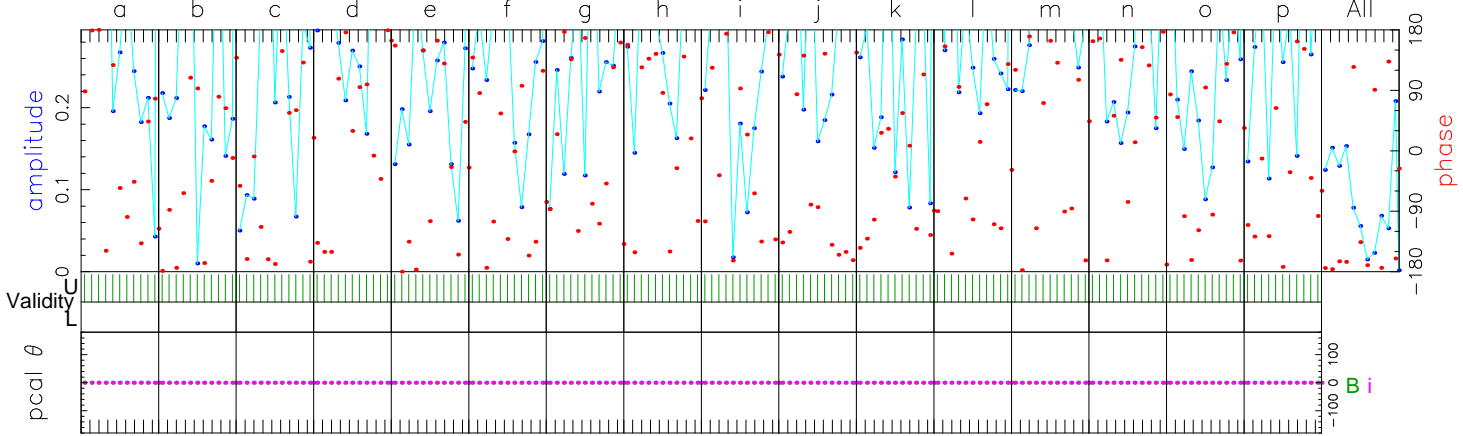
| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | | | | | | |
|--|----------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|--------------------------|--|----------------------|--------------|-------------------|---------|-------|--|
| | -57.4 | -86.5 | -153.0 | -93.5 | -117.3 | 32.0 | -4.1 | -119.3 | -114.6 | -87.6 | -69.0 | -135.9 | -75.8 | -111.8 | -110.4 | -46.6 | | Phase | -96.4 | | | | | | |
| | 0.1 | 0.2 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | | Ampl. | 0.1 | | | | | | |
| | 102.4 | 145.4 | 149.7 | 241.9 | 199.1 | 184.5 | 61.2 | 143.7 | 84.3 | 106.0 | 92.1 | 142.4 | 145.3 | 249.5 | 4.1 | 197.9 | | Sbd box | 144.3 | | | | | | |
| UL | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used | | | | | | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | | | | | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC phase | | | | | | | |
| b:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC | | | | | | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | | | | | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | | | | | | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids | | | | | | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks | | | | | | | |
| | | | | | | | | | | | | | | | | | | Chan ids | | | | | | | |
| | | | | | | | | | | | | | | | | | | Tracks | | | | | | | |
| Group delay (usec)(sbd) | | | 1.33305326001E+04 | | | | | | | | | | | | | | | Apriori delay (usec) | 1.33304073662E+04 | Resid mbdelay (usec) | 2.33925E-04 | +/- | 1.8E-04 | | |
| Sband delay (usec) | | | 1.33305265442E+04 | | | | | | | | | | | | | | | Apriori clock (usec) | -9.0395465E-02 | Resid sbdelay (usec) | 1.19178E-01 | +/- | 2.9E-03 | | |
| Phase delay (usec) | | | 1.33304073630E+04 | | | | | | | | | | | | | | | Apriori clockrate (us/s) | 1.1060491E-07 | Resid phdelay (usec) | -3.10785E-06 | +/- | 6.2E-07 | | |
| Delay rate (us/s) | | | 1.19042688867E+00 | | | | | | | | | | | | | | | Apriori rate (us/s) | 1.19042768442E+00 | Resid rate (us/s) | -7.95750E-07 | +/- | 2.2E-09 | | |
| Total phase (deg) | | | | 91.0 | | | | | | | | | | | | | | Apriori accel (us/s/s) | -6.02686165011E-05 | Resid phase (deg) | -96.4 | +/- | 19.3 | | |
| ph/seg (deg) | RMS | Theor. | | | | | | | | | | | | | | | | | PCal mode: MANUAL, MANUAL | | | | | | |
| amp/seg (%) | 30.8 | 33.4 | | | | | | | | | | | | | | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | | | sb window (us) | -1.000 | 1.000 | |
| ph/frq (deg) | 38.6 | 58.4 | | | | | | | | | | | | | | | | | Bits/sample: 2x2 | | | mb window (us) | -0.016 | 0.016 | |
| amp/frq (%) | 51.3 | 38.6 | | | | | | | | | | | | | | | | | Sample rate(MISamp/s): 64 | | | dr window (ns/s) | -0.011 | 0.011 | |
| | 68.2 | 67.4 | | | | | | | | | | | | | | | | | Data rate(Mb/s): 2048 | | | ion window (TEC) | 0.00 | 0.00 | |
| | | | | | | | | | | | | | | | | | | | nlags: 128 | | | t_cohere infinite | | | |
| b: az 105.8 el 73.7 pa -58.9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| i: az 307.4 el 20.3 pa 58.6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| u,v (fr/asec) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Control file: cf_1234_gmva | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input file: /Exps/c192b/v2/1234/No0205/bi..130G9L | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output file: /Exps/c192b/v2/1234/No0205/bi.W.55.130G9L | | | | | | | | | | | | | | | | | | | | | | | | | |

simultaneous interpolator



Fringe quality 0
SNR 5.6
Int time 479.574
Amp 0.098
Phase -174.7
PFD 9.9e-01
Delays (us)
SBD -0.991762
MBD -0.012230
Fringe rate (Hz) 0.316755
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112303
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|--------------|
| | -156.6 | 109.6 | 178.5 | -179.2 | 168.4 | 159.3 | -135.3 | 139.8 | -142.8 | -149.8 | -3.2 | -127.0 | 178.2 | 149.9 | 137.8 | -106.1 | | Phase -174.7 |
| | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | | Ampl. 0.1 |
| | 43.5 | 84.8 | 255.6 | 247.4 | 162.4 | 7.2 | 57.7 | 245.4 | 90.1 | 2.1 | 8.2 | 25.2 | 197.8 | 33.1 | 156.5 | 177.0 | | Sbd box 2.1 |
| U/L | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | | APs used |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| B:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase |
| B:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC |
| B | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| B | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks |

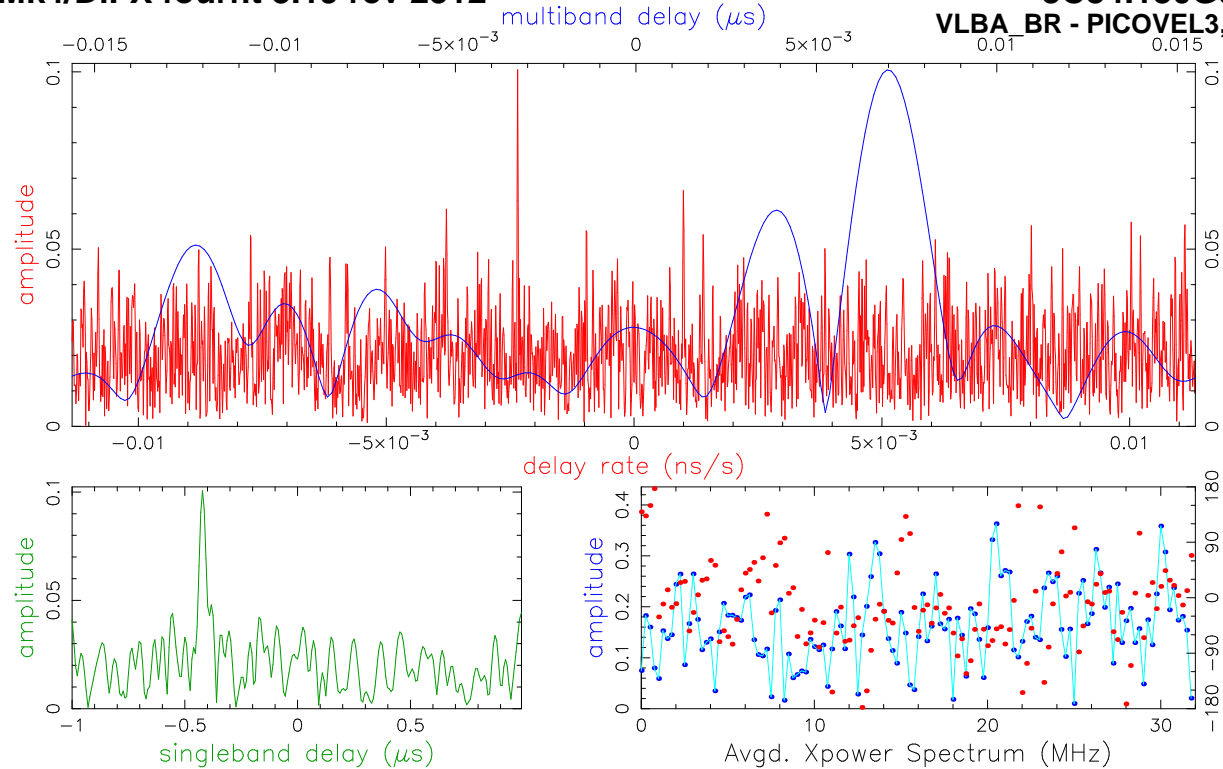
Group delay (usec)(sbd) 8.89322746877E+02 Apriori delay (usec) 8.90303726820E+02 Resid mbdelay (usec) -1.22299E-02 +/- 1.9E-04
 Sband delay (usec) 8.89311964820E+02 Apriori clock (usec) 1.7345242E+01 Resid sbdelay (usec) -9.91762E-01 +/- 3.1E-03
 Phase delay (usec) 8.90303721187E+02 Apriori clockrate (us/s) 1.5299999E-07 Resid phdelay (usec) -5.63301E-06 +/- 6.6E-07
 Delay rate (us/s) 2.12965050828E-01 Apriori rate (us/s) 2.12961373612E-01 Resid rate (us/s) 3.67722E-06 +/- 2.4E-09
 Total phase (deg) -164.5 Apriori accel (us/s/s) 8.01769847722E-06 Resid phase (deg) -174.7 +/- 20.3

ph/seg (deg) RMS Theor. Amplitude 0.098 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 40.1 35.2 Search (2048X64) 0.092 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.9 61.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.7 71.0 Inc. seg. avg. 0.084 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 308.6 el 22.7 pa 41.3 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -1618.828 1694.740 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bi.W.58.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, bi
VLBA_BR - PICOVEL3, fgroup W, pol RL

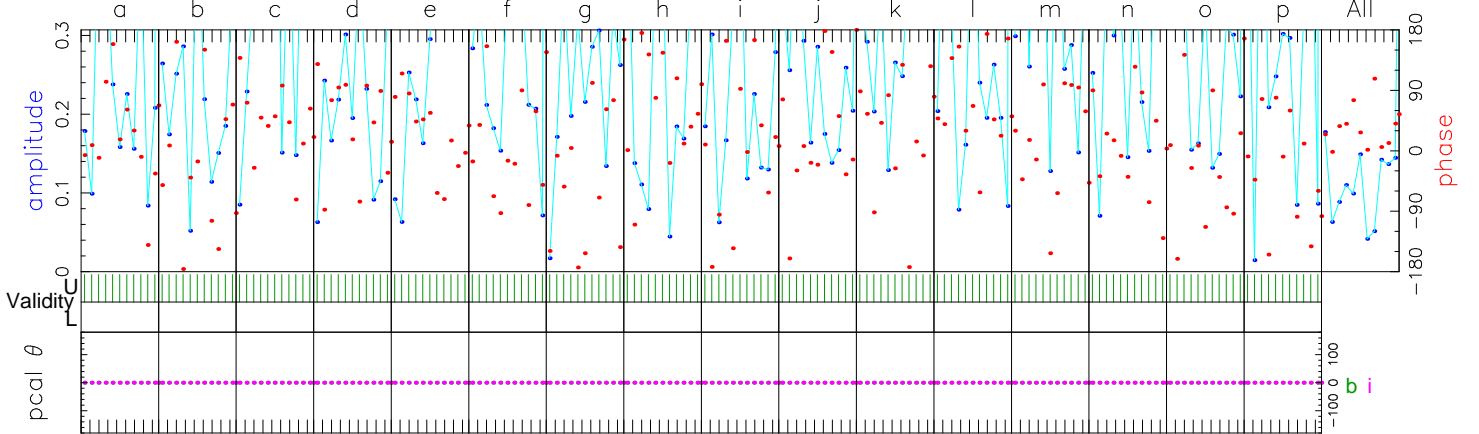


Fringe quality 0

SNR 6.0
Int time 479.002
Amp 0.102
Phase 30.2
PFD 3.6e-01
Delays (us)
SBD -0.421666
MBD 0.006993
Fringe rate (Hz)
-0.202120
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112309
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

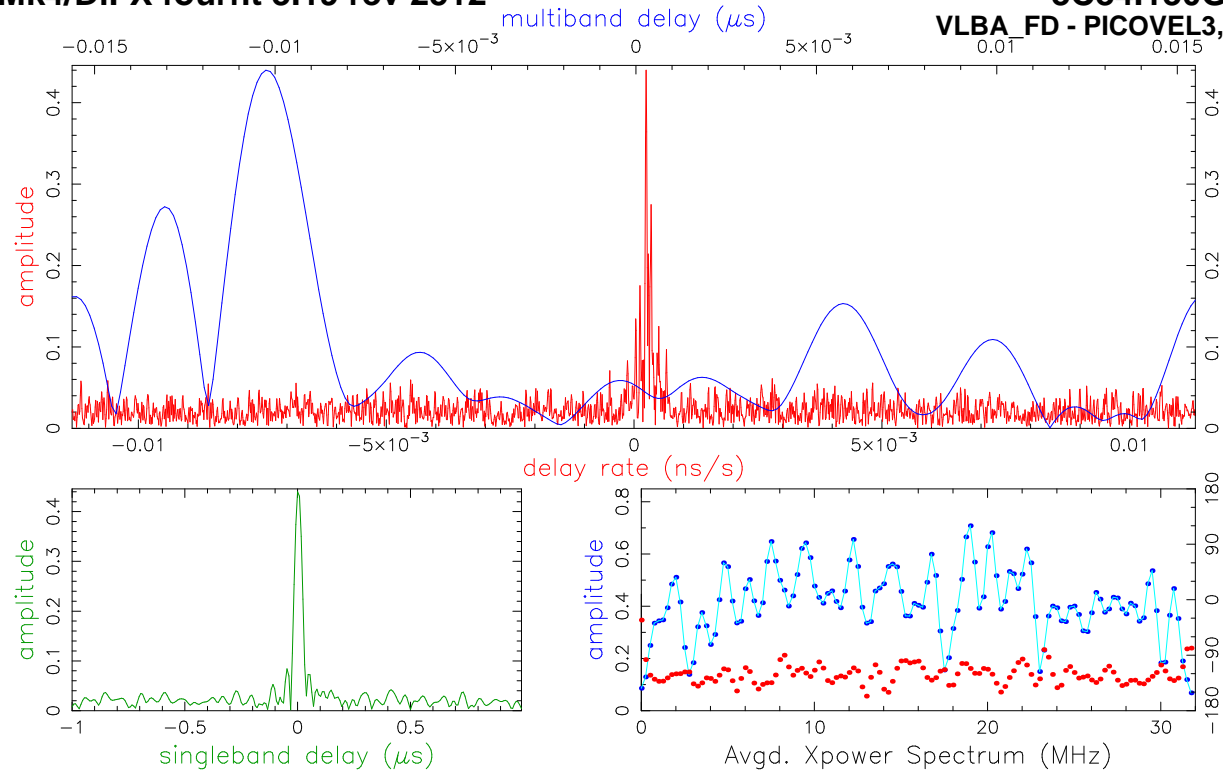
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | |
|-------------------------|-------------------|----------|------------------|--------------------------|----------|--|--------------------|-----------------------|----------|----------------------|----------|------------------|--------------|----------|----------|-------------|------------|-------|----------|----------|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs |
| b:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase |
| b:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | | | Chan ids |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | | | Tracks |
| | | | | | | | | | | | | | | | | | | | | Tracks |
| Group delay (usec)(sbd) | 1.33299768587E+04 | | | Apriori delay (usec) | | | 1.33304073662E+04 | | | Resid mbdelay (usec) | | | 6.99258E-03 | | | +/- 1.8E-04 | | | | |
| Sband delay (usec) | 1.33299857002E+04 | | | Apriori clock (usec) | | | -9.0395465E-02 | | | Resid sbdelay (usec) | | | -4.21666E-01 | | | +/- 2.9E-03 | | | | |
| Phase delay (usec) | 1.33304073671E+04 | | | Apriori clockrate (us/s) | | | 1.1060491E-07 | | | Resid phdelay (usec) | | | 9.74219E-07 | | | +/- 6.1E-07 | | | | |
| Delay rate (us/s) | 1.19042533801E+00 | | | Apriori rate (us/s) | | | 1.19042768442E+00 | | | Resid rate (us/s) | | | -2.34642E-06 | | | +/- 2.2E-09 | | | | |
| Total phase (deg) | 217.6 | | | Apriori accel (us/s/s) | | | -6.02686165011E-05 | | | Resid phase (deg) | | | 30.2 | | | +/- 19.0 | | | | |
| ph/seg (deg) | RMS | Theor. | Amplitude | 0.102 +/- 0.017 | | Pcal mode: MANUAL, MANUAL | | PC period (AP's) 5, 5 | | | | | | | | | | | | |
| amp/seg (%) | 31.6 | 33.0 | Search (2048X64) | 0.097 | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | | -1.000 | | 1.000 | | | | | | | | |
| ph/frq (deg) | 48.5 | 57.5 | Interp. | 0.000 | | Bits/sample: 2x2 | | SampCntNorm: enabled | | mb window (us) | | -0.016 | | 0.016 | | | | | | |
| amp/frq (%) | 53.4 | 38.1 | Inc. seg. avg. | 0.097 | | Sample rate(MISamp/s): 64 | | dr window (ns/s) | | -0.011 | | 0.011 | | | | | | | | |
| | 76.3 | 66.4 | Inc. frq. avg. | 0.098 | | Data rate(Mb/s): 2048 | | nlags: 128 | | t_cohere infinite | | ion window (TEC) | | 0.00 | | 0.00 | | | | |

b: az 105.8 el 73.7 pa -58.9 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -9216.026 -3171.907 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bi..130G9L Output file: /Exps/c192b/v2/1234/No0205/bi.W.76.130G9L

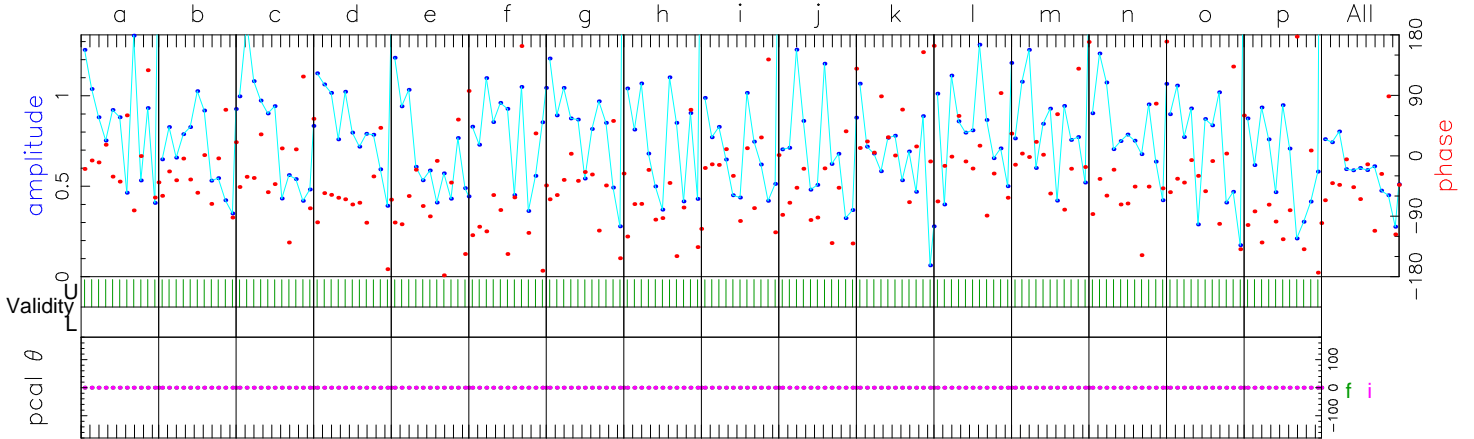


Fringe quality 6

SNR 26.6
Int time 477.608
Amp 0.446
Phase -45.7
PFD 0.0e+00
Delays (us)
SBD 0.002995
MBD -0.010204
Fringe rate (Hz) 0.021394
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112322
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



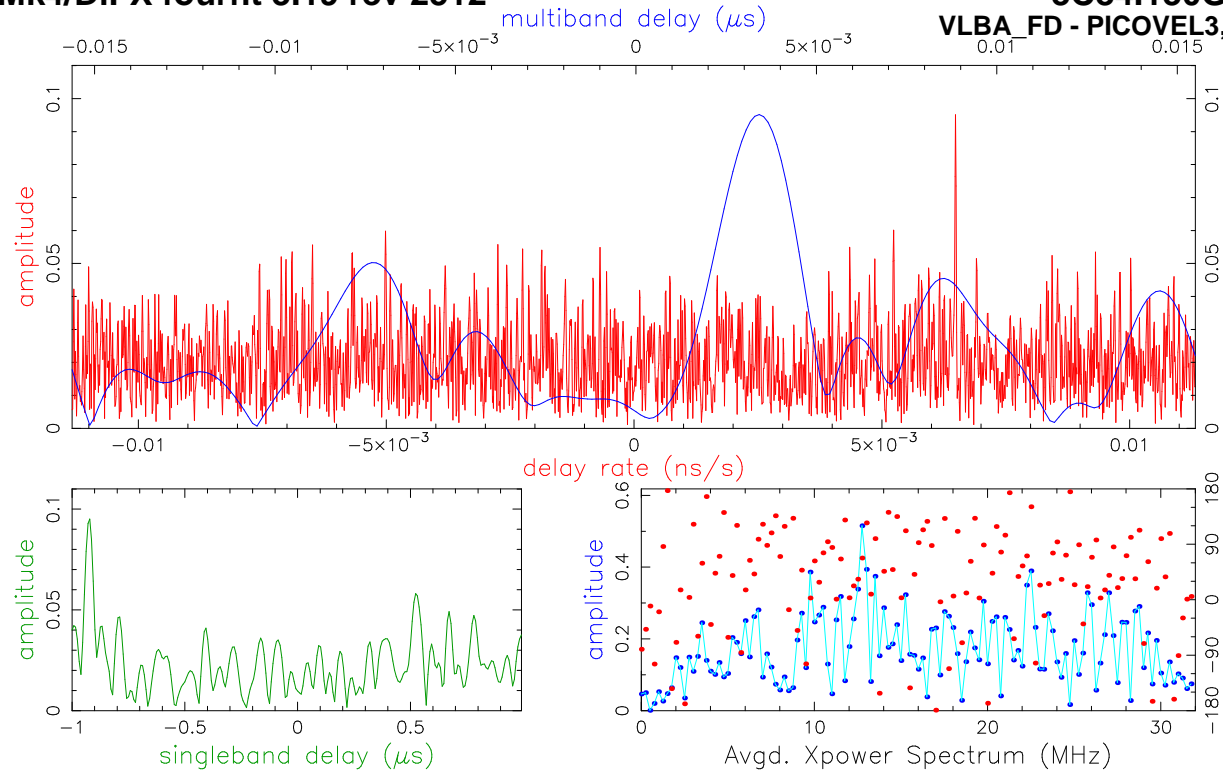
| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | |
|-------------------------|----------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|---|-----------------------------------|-------------|
| | -19.4 | -29.7 | -31.1 | -67.2 | -76.3 | -116.7 | -43.9 | -80.1 | -19.7 | -58.6 | 24.4 | -11.8 | -9.7 | -55.7 | -39.6 | -107.1 | | Phase -45.7 | | |
| | 0.6 | 0.6 | 0.6 | 0.7 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | | Ampl. 0.5 | | |
| | 128.4 | 129.6 | 129.2 | 129.2 | 128.8 | 128.8 | 129.8 | 129.9 | 129.2 | 129.2 | 129.4 | 129.1 | 129.3 | 129.1 | 129.5 | 127.4 | | Sbd box 129.4 | | |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used 1000 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs 1000 | | |
| fi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase 0:0 | | |
| fi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC 0:0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp 1000 | | |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks | | |
| | | | | | | | | | | | | | | | | | | Chan ids | | |
| | | | | | | | | | | | | | | | | | | Tracks | | |
| Group delay (usec)(sbd) | | | 1.37024401406E+04 | | | | | | | | | | | | | | | Apriori delay (usec) 1.37024503450E+04 | Resid mbdelay (usec) -1.02044E-02 | +/- 4.1E-05 |
| Sband delay (usec) | | | 1.37024533395E+04 | | | | | | | | | | | | | | | Apriori clock (usec) 9.9807751E-01 | Resid sbdelay (usec) 2.99450E-03 | +/- 6.5E-04 |
| Phase delay (usec) | | | 1.37024503435E+04 | | | | | | | | | | | | | | | Apriori clockrate (us/s) 2.6205050E-07 | Resid phdelay (usec) -1.47305E-06 | +/- 1.4E-07 |
| Delay rate (us/s) | | | 1.00027943821E+00 | | | | | | | | | | | | | | | Apriori rate (us/s) 1.00027918985E+00 | Resid rate (us/s) 2.48359E-07 | +/- 5.0E-10 |
| Total phase (deg) | | | | | 211.8 | | | | | | | | | | | | | Apriori accel (us/s/s) -7.98379090048E-05 | Resid phase (deg) -45.7 | +/- 4.3 |

ph/seg (deg) 53.2 7.5
amp/seg (%) 45.9 13.0
ph/frq (deg) 38.6 8.6
amp/frq (%) 24.9 15.0

f: az 20.4 el 78.2 pa -154.6
i: az 307.4 el 20.3 pa 58.6
u,v (fr/asec) -7790.470 -6106.815

Control file: cf_1234_gmva
Input file: /Exps/c192b/v2/1234/No0205/ft..130G9L
Output file: /Exps/c192b/v2/1234/No0205/ft.W.111.130G9L

PCal mode: MANUAL, MANUAL
PCal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048
PC period (AP's) 5, 5
SampCntNorm: enabled
nlags: 128
t_cohere infinite
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00
simultaneous interpolator

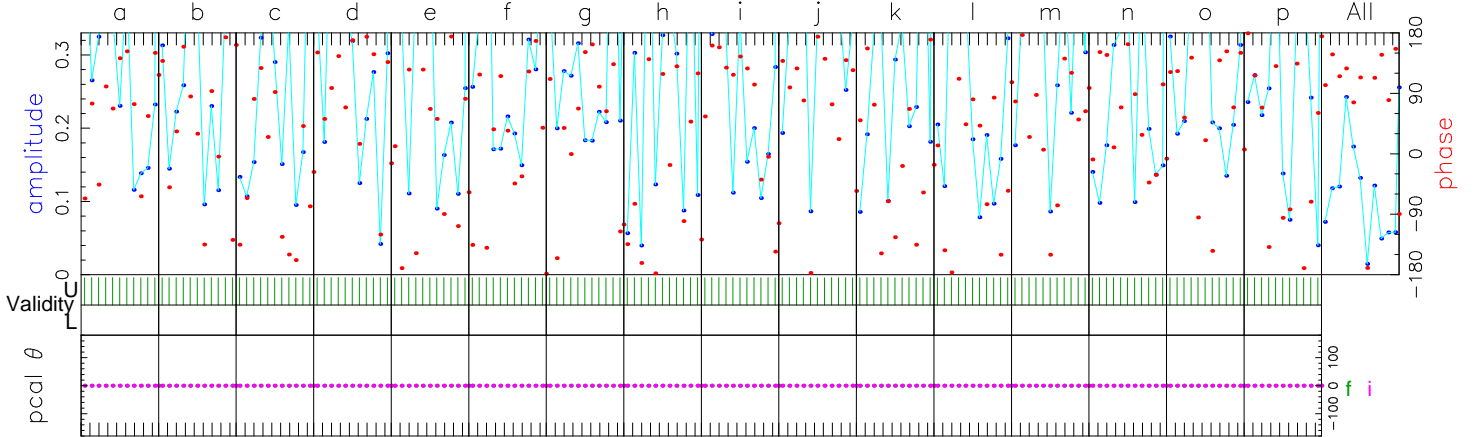


Fringe quality 0

SNR 5.7
Int time 477.609
Amp 0.110
Phase 116.7
PFD 9.2e-01
Delays (us)
SBD -0.924370
MBD 0.003431
Fringe rate (Hz)
0.559872
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

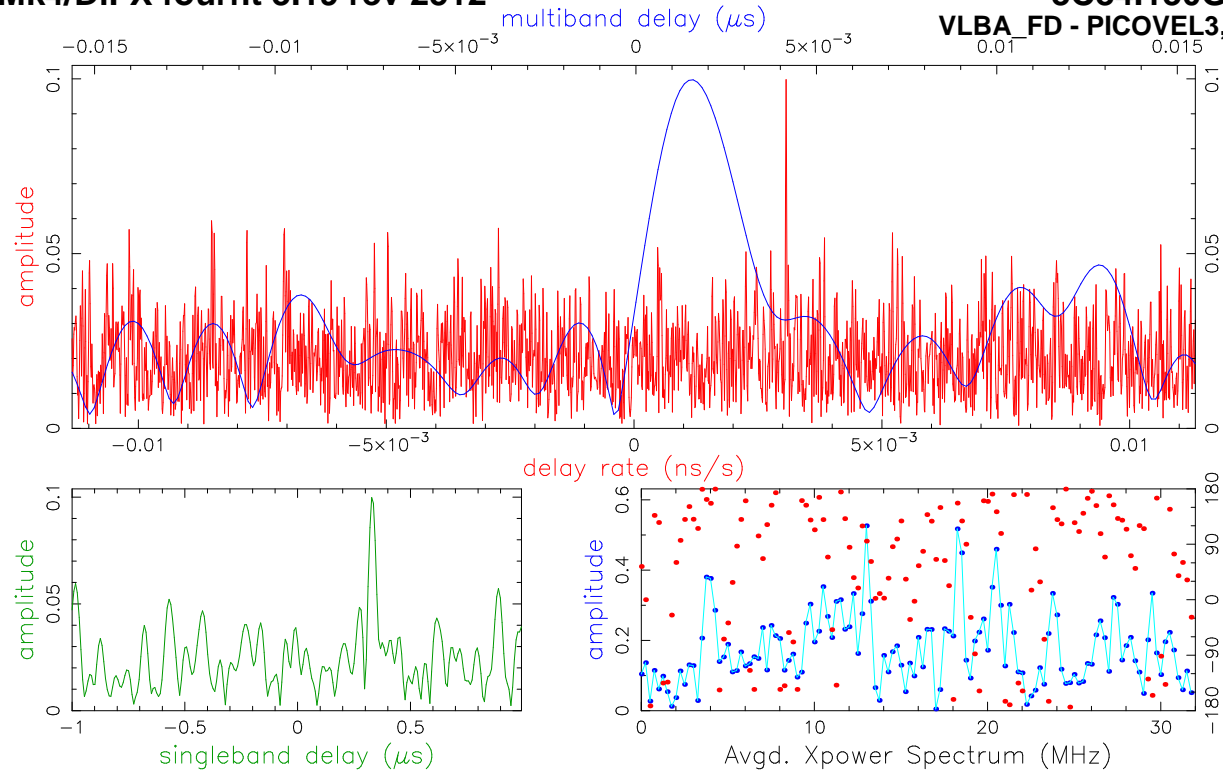
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112328
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|----------|--------------------------|----------|----------|--------------------|----------|----------|----------------------|----------|----------|--------------|----------|----------|-------------|------------|-------|
| 93.9 | 114.6 | -97.4 | 128.6 | 123.8 | 141.2 | 109.3 | 110.4 | 135.2 | 112.9 | -91.4 | 101.7 | 77.7 | 53.7 | 123.6 | 161.4 | 161.4 | Phase | 116.7 |
| 0.1 | 0.1 | 0.0 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | Ampl. | 0.1 |
| 7.3 | 141.4 | 90.4 | 10.8 | 181.2 | 113.8 | 103.7 | 15.2 | 43.1 | 11.6 | 197.9 | 208.4 | 17.4 | 151.1 | 109.1 | 23.2 | 23.2 | Sbd box | 10.7 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| fi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| fi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | |
| | | | | | | | | | | | | | | | | | Chan ids | |
| | | | | | | | | | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.37015162759E+04 | | | Apriori delay (usec) | | | 1.37024503450E+04 | | | Resid mbdelay (usec) | | | 3.43092E-03 | | | +/- 1.9E-04 | | |
| Sband delay (usec) | 1.37015259755E+04 | | | Apriori clock (usec) | | | 9.9807751E-01 | | | Resid sbdelay (usec) | | | -9.24370E-01 | | | +/- 3.0E-03 | | |
| Phase delay (usec) | 1.37024503487E+04 | | | Apriori clockrate (us/s) | | | 2.6205050E-07 | | | Resid phdelay (usec) | | | 3.76430E-06 | | | +/- 6.5E-07 | | |
| Delay rate (us/s) | 1.00028568941E+00 | | | Apriori rate (us/s) | | | 1.00027918985E+00 | | | Resid rate (us/s) | | | 6.49956E-06 | | | +/- 2.3E-09 | | |
| Total phase (deg) | 14.2 | | | Apriori accel (us/s/s) | | | -7.98379090048E-05 | | | Resid phase (deg) | | | 116.7 | | | +/- 20.0 | | |

ph/seg (deg) 34.1 34.7 Search (2048X64) 0.094 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.8 60.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 62.0 40.0 Inc. seg. avg. 0.103 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 68.6 69.9 Inc. frq. avg. 0.105 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 20.4 el 78.2 pa -154.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -7790.470 -6106.815 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fi..130G9L Output file: /Exps/c192b/v2/1234/No0205/fi.W.131.130G9L simultaneous interpolator

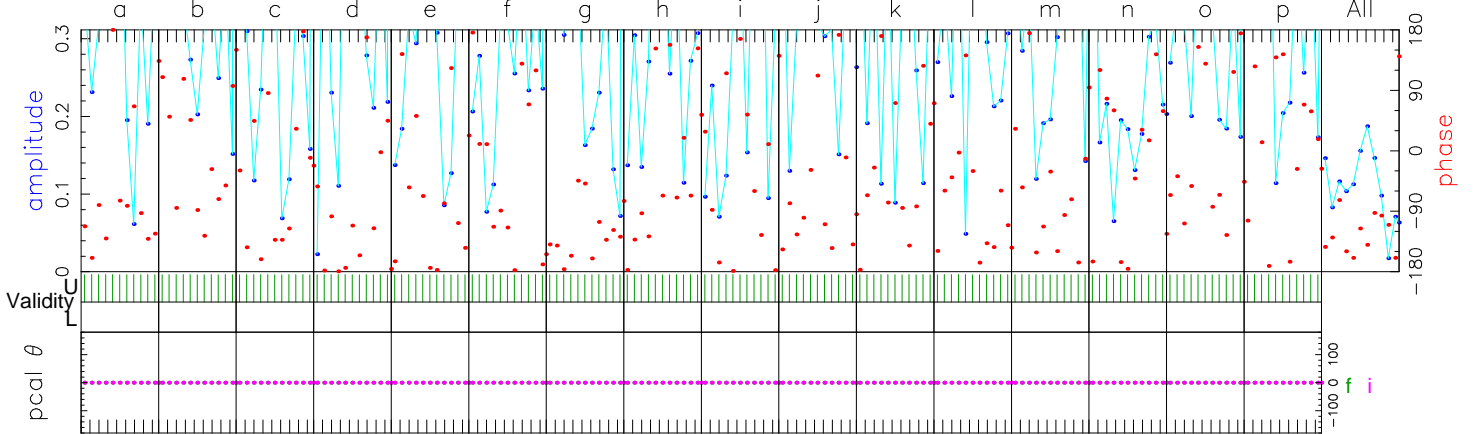


Fringe quality 0

SNR 6.0
Int time 477.608
Amp 0.104
Phase -125.1
PFD 3.6e-01
Delays (us)
SBD 0.330773
MBD 0.001529
Fringe rate (Hz) 0.264342
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112332
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

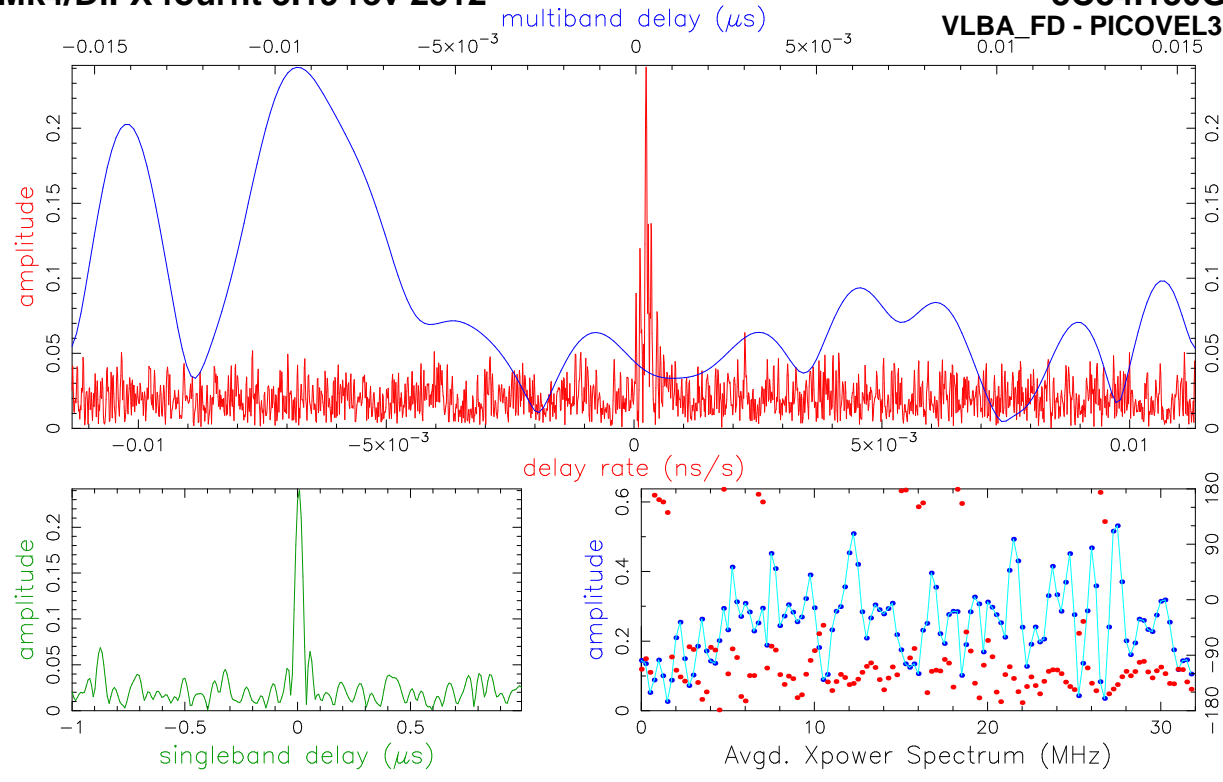


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|---------------|
| | -118.6 | -15.8 | -133.4 | -145.2 | -133.6 | 171.0 | -129.1 | -131.4 | -139.2 | -114.1 | -88.0 | -81.8 | -106.4 | 135.3 | -119.6 | 94.8 | | Phase -125.1 |
| | 0.3 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | | Ampl. 0.1 |
| | 171.2 | 243.7 | 254.6 | 235.0 | 101.4 | 164.5 | 171.3 | 251.4 | 1.7 | 171.9 | 217.4 | 189.7 | 58.3 | 151.6 | 18.6 | 166.6 | | Sbd box 171.3 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| fi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase |
| fi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks |

Group delay (usec)(sbd) 1.37027956235E+04 Apriori delay (usec) 1.37024503450E+04 Resid mbdelay (usec) 1.52851E-03 +/- 1.8E-04
 Sband delay (usec) 1.37027811180E+04 Apriori clock (usec) 9.9807751E-01 Resid sbdelay (usec) 3.30773E-01 +/- 2.9E-03
 Phase delay (usec) 1.37024503409E+04 Apriori clockrate (us/s) 2.6205050E-07 Resid phdelay (usec) -4.03320E-06 +/- 6.1E-07
 Delay rate (us/s) 1.00028225860E+00 Apriori rate (us/s) 1.00027918985E+00 Resid rate (us/s) 3.06875E-06 +/- 2.2E-09
 Total phase (deg) 132.4 Apriori accel (us/s/s) -7.98379090048E-05 Resid phase (deg) -125.1 +/- 19.0

RMS Theor. Amplitude 0.104 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 28.0 33.0 Search (2048X64) 0.096 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 45.6 57.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 59.9 38.1 Inc. seg. avg. 0.099 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 65.9 66.4 Inc. frq. avg. 0.107 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 20.4 el 78.2 pa -154.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -7790.470 -6106.815 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fi..130G9L Output file: /Exps/c192b/v2/1234/No0205/fi.W.147.130G9L

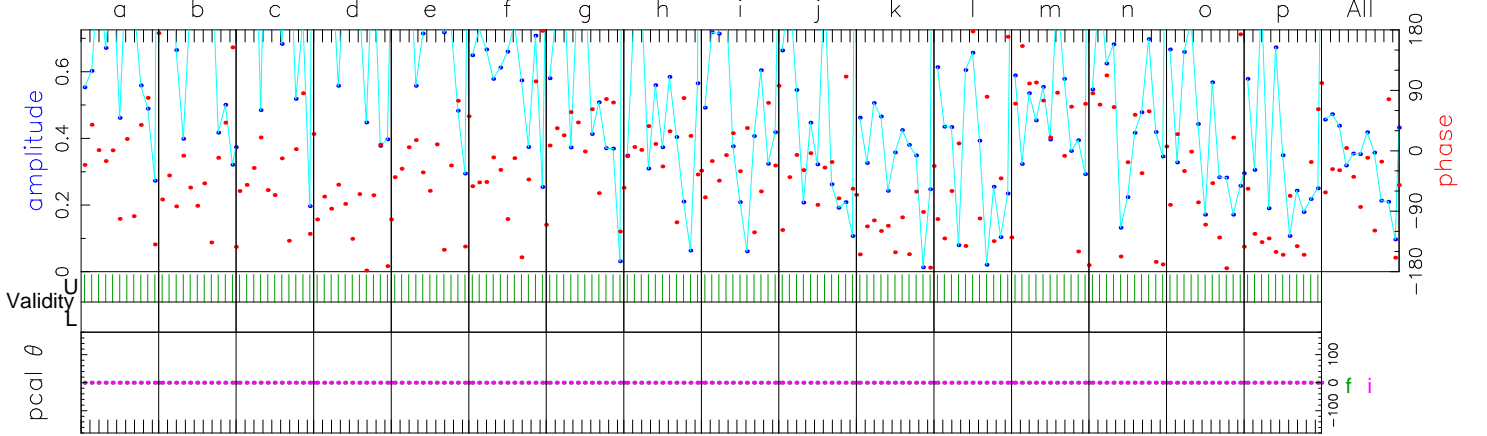


Fringe quality 9

SNR 14.5
Int time 477.609
Amp 0.242
Phase -38.9
PFD 1.5e-38
Delays (us)
SBD 0.005992
MBD -0.009374
Fringe rate (Hz) 0.021423
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112316
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|--------------------------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f <i>i</i> | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| f <i>i</i> | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| Group delay (usec)(sbd) | | 1.37024409712E+04 | | | | | | | | | | | | | | | | |
| Sband delay (usec) | | 1.37024563370E+04 | | | | | | | | | | | | | | | | |
| Phase delay (usec) | | 1.37024503437E+04 | | | | | | | | | | | | | | | | |
| Delay rate (us/s) | | 1.00027943855E+00 | | | | | | | | | | | | | | | | |
| Total phase (deg) | | | | | 218.6 | | | | | | | | | | | | | |
| 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) | | | | | | | | | | | | | | | | | | |

RMS Theor. Amplitude 0.242 +/- 0.017
 ph/seg (deg) 60.3 13.7 Search (2048X64) 0.231
 amp/seg (%) 60.7 24.0 Interp. 0.000
 ph/frq (deg) 65.1 15.9 Inc. seg. avg. 0.326
 amp/frq (%) 79.7 27.7 Inc. frq. avg. 0.370

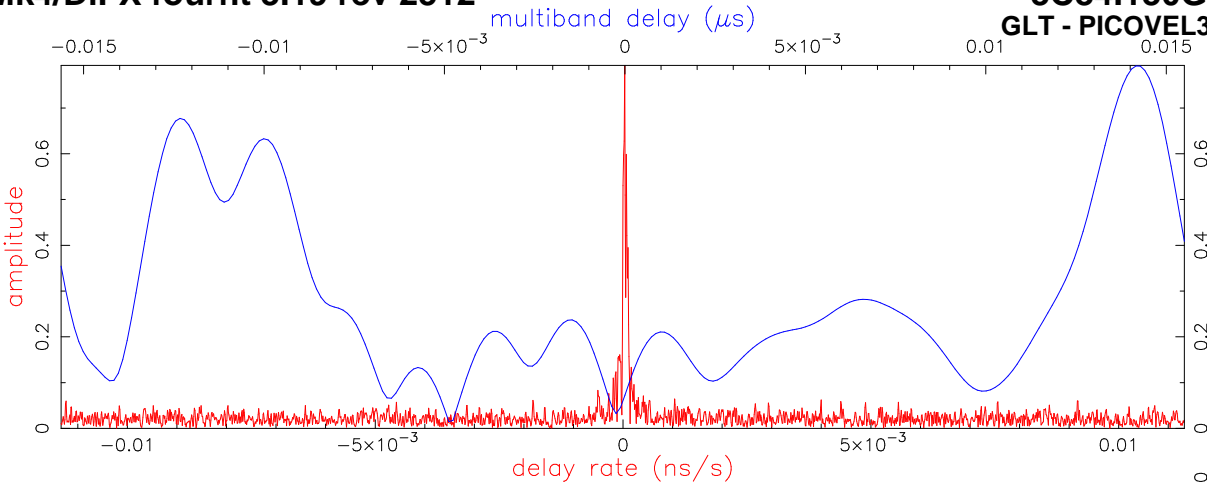
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 20.4 el 78.2 pa -154.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -7790.470 -6106.815 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fi..130G9L Output file: /Exps/c192b/v2/1234/No0205/fi.W.90.130G9L

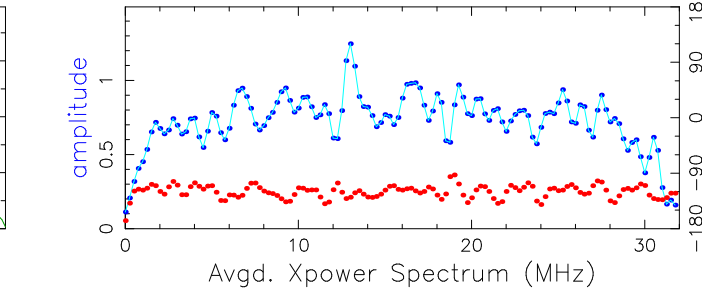
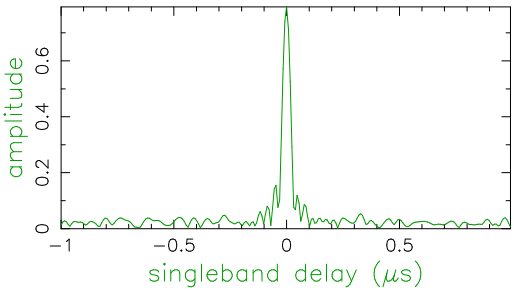
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gi
GLT - PICOVEL3, fgroup W, pol LL



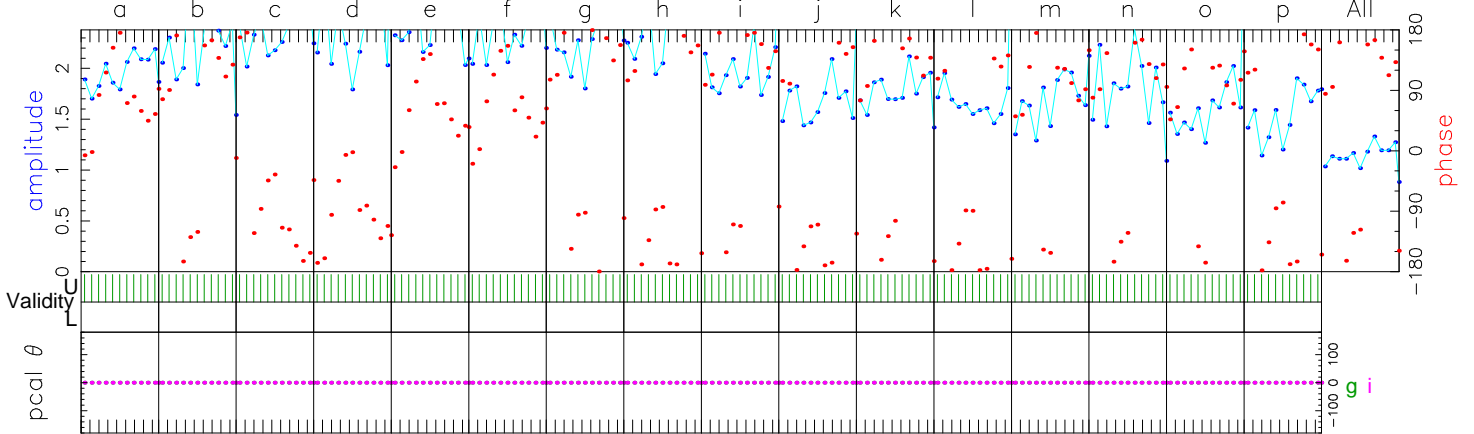
Fringe quality 1

SNR 47.5
Int time 479.780
Amp 0.793
Phase 153.3
PFD 0.0e+00
Delays (us)
SBD -0.000878
MBD 0.014202
Fringe rate (Hz)
0.003164
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192b
Yr:day 16383
2020:080:062909
2020:086:112336
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| 72.6 | 154.1 | -126.9 | -96.3 | 60.2 | 62.2 | 170.7 | -177.4 | 168.1 | 176.4 | 154.8 | 169.0 | 116.1 | 149.6 | 113.6 | -179.1 | | Phase | 153.3 |
| 1.3 | 1.5 | 1.6 | 1.5 | 1.7 | 1.5 | 1.6 | 1.6 | 1.4 | 1.2 | 1.2 | 1.0 | 1.1 | 1.2 | 1.1 | 1.0 | | Ampl. | 1.3 |
| 130.2 | 129.3 | 129.2 | 128.9 | 128.8 | 128.9 | 128.8 | 128.9 | 128.8 | 128.8 | 128.8 | 128.8 | 128.6 | 129.2 | 129.0 | 129.7 | 129.6 | Sbd box | 128.9 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| g | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| g:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| g:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC | |
| g | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| g | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Tracks | |

Group delay (usec)(sbd) 9.75840727370E+03 Apriori delay (usec) 9.75839307167E+03 Resid mbdelay (usec) 1.42020E-02 +/- 2.3E-05
 Sband delay (usec) 9.75839219317E+03 Apriori clock (usec) 1.8364235E+00 Resid sbdelay (usec) -8.78500E-04 +/- 3.6E-04
 Phase delay (usec) 9.75839307661E+03 Apriori clockrate (us/s) 4.2799997E-07 Resid phdelay (usec) 4.94404E-06 +/- 7.8E-08
 Delay rate (us/s) 7.83588190297E-01 Apriori rate (us/s) 7.83588153565E-01 Resid rate (us/s) 3.67316E-08 +/- 2.8E-10
 Total phase (deg) 223.0 Apriori accel (us/s/s) -2.41463241686E-05 Resid phase (deg) 153.3 +/- 2.4

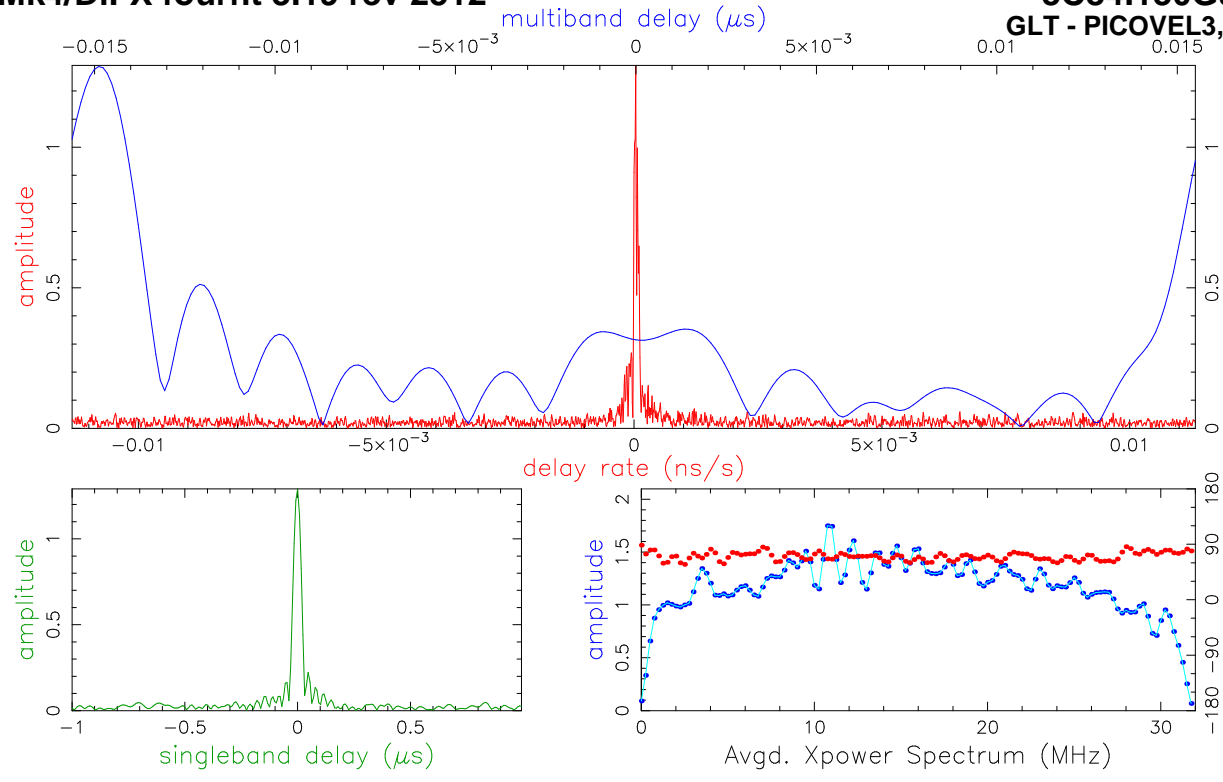
RMS Theor. Amplitude 0.793 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 50.2 4.2 Search (2048X64) 0.766 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 47.5 7.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 58.5 4.8 Inc. seg. avg. 1.156 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 75.5 8.4 Inc. frq. avg. 1.342 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 217.9 el 52.8 pa 10.1 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6043.794 829.981 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gi..130G9L Output file: /Exps/c192b/v2/1234/No0205/gi.W.161.130G9L

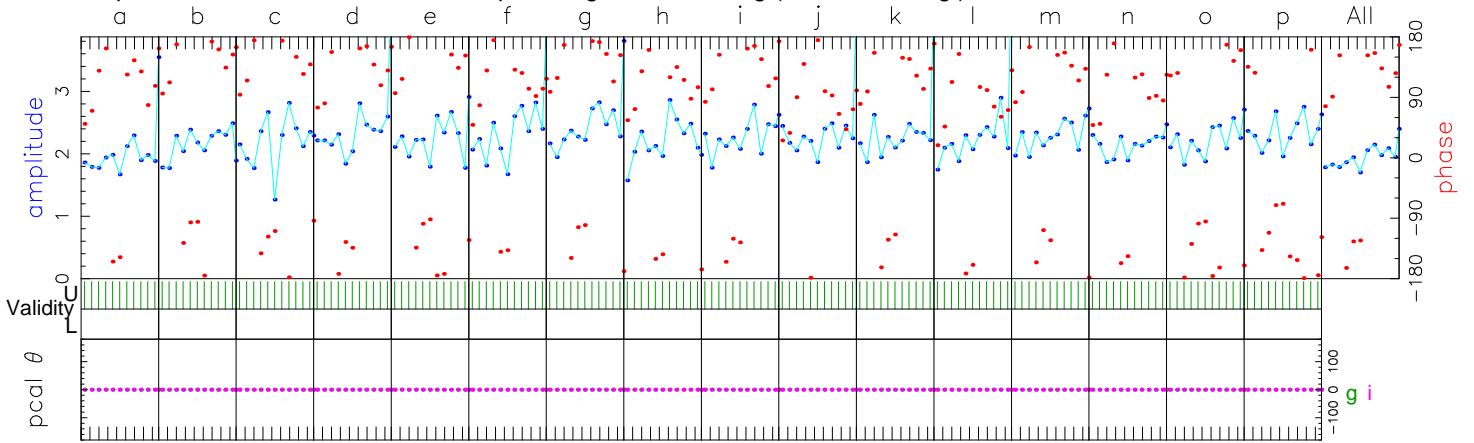
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gi
GLT - PICOVEL3, fgroup W, pol RR



Fringe quality 3
SNR 77.3
Int time 479.684
Amp 1.291
Phase 147.1
PFD 0.0e+00
Delays (us)
SBD -0.001527
MBD -0.014871
Fringe rate (Hz) 0.003195
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112343
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

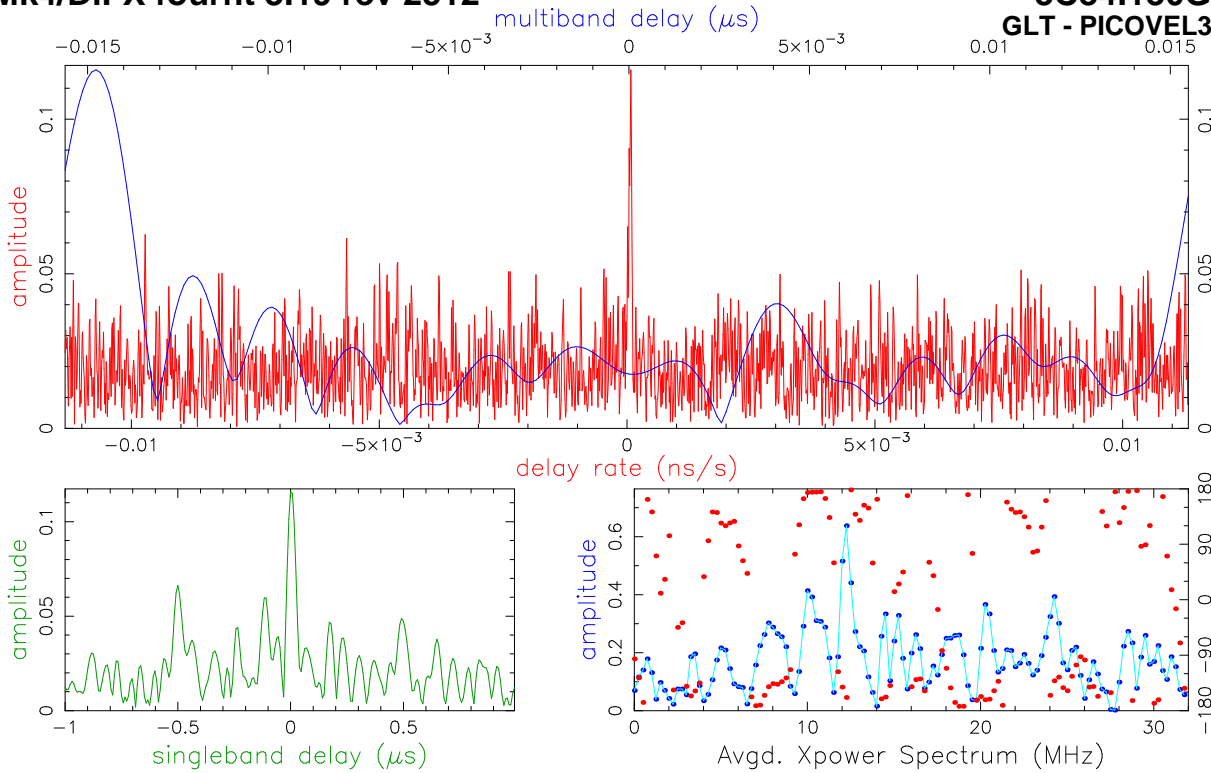


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-------------------------|-------------------|----------|----------|--------------------------|----------|----------|--------------------|----------|----------|----------------------|----------|----------|--------------|----------|----------|-------------|------------|----------|--|
| 127.3 | 175.1 | 167.7 | 148.9 | 174.0 | 122.1 | 167.2 | 125.0 | 153.4 | 86.6 | 146.3 | 98.0 | 153.4 | 113.0 | -179.1 | -157.3 | | Phase | 147.1 | |
| 1.3 | 1.4 | 1.5 | 1.6 | 1.4 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 | 1.5 | 1.4 | 1.5 | 1.4 | 1.6 | 1.5 | | Ampl. | 1.5 | |
| 130.1 | 129.2 | 129.0 | 128.7 | 128.7 | 128.4 | 128.7 | 128.5 | 128.3 | 128.5 | 128.2 | 128.4 | 128.7 | 128.8 | 129.3 | 129.3 | | Sbd box | 128.8 | |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used | |
| g | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | |
| g:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase | |
| g:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC | |
| g | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | |
| g | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| g | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks | |
| | | | | | | | | | | | | | | | | | | Chan ids | |
| | | | | | | | | | | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 9.75837820079E+03 | | | Apriori delay (usec) | | | 9.75839307167E+03 | | | Resid mbdelay (usec) | | | -1.48709E-02 | | | +/- 1.4E-05 | | | |
| Sband delay (usec) | 9.75839154417E+03 | | | Apriori clock (usec) | | | 1.8364235E+00 | | | Resid sbdelay (usec) | | | -1.52750E-03 | | | +/- 2.2E-04 | | | |
| Phase delay (usec) | 9.75839307641E+03 | | | Apriori clockrate (us/s) | | | 4.2799997E-07 | | | Resid phdelay (usec) | | | 4.74213E-06 | | | +/- 4.8E-08 | | | |
| Delay rate (us/s) | 7.83588190654E-01 | | | Apriori rate (us/s) | | | 7.83588153565E-01 | | | Resid rate (us/s) | | | 3.70887E-08 | | | +/- 1.7E-10 | | | |
| Total phase (deg) | 216.8 | | | Apriori accel (us/s/s) | | | -2.41463241686E-05 | | | Resid phase (deg) | | | 147.1 | | | +/- 1.5 | | | |

ph/seg (deg) 51.3 2.6 Search (2048X64) 1.210 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 50.0 4.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 33.2 3.0 Inc. seg. avg. 1.921 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 16.9 5.2 Inc. frq. avg. 1.490 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 217.9 el 52.8 pa 10.1 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6043.794 829.981 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gi..130G9L Output file: /Exps/c192b/v2/1234/No0205/gi.W.178.130G9L

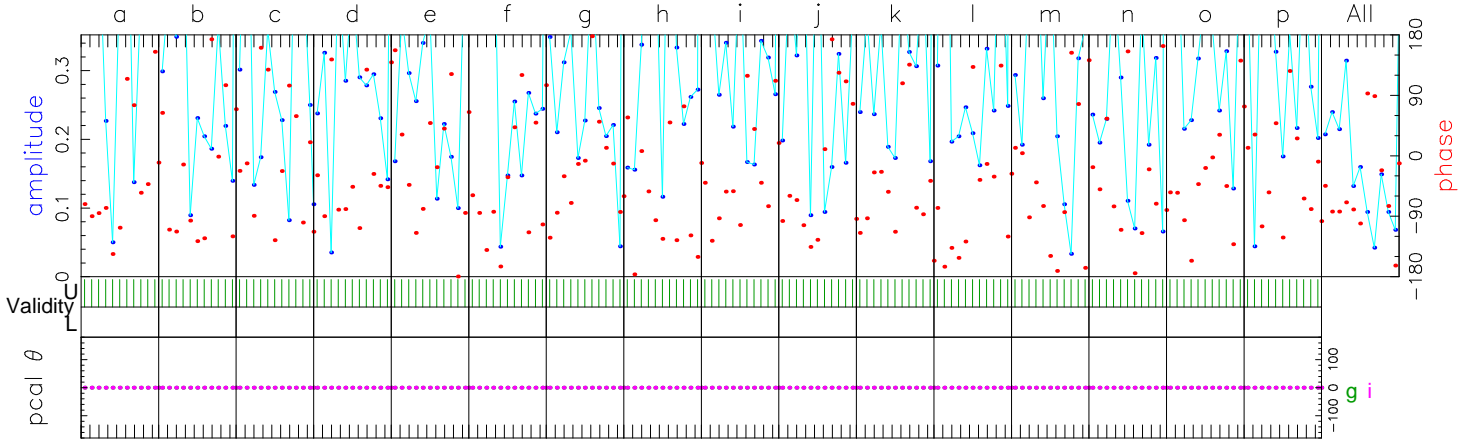
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gi
GLT - PICOVEL3, fgroup W, pol LR



Fringe quality 0
SNR 7.0
Int time 479.780
Amp 0.117
Phase -71.1
PFD 6.2e-04
Delays (us)
SBD 0.003309
MBD -0.014756
Fringe rate (Hz) 0.006754
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112349
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

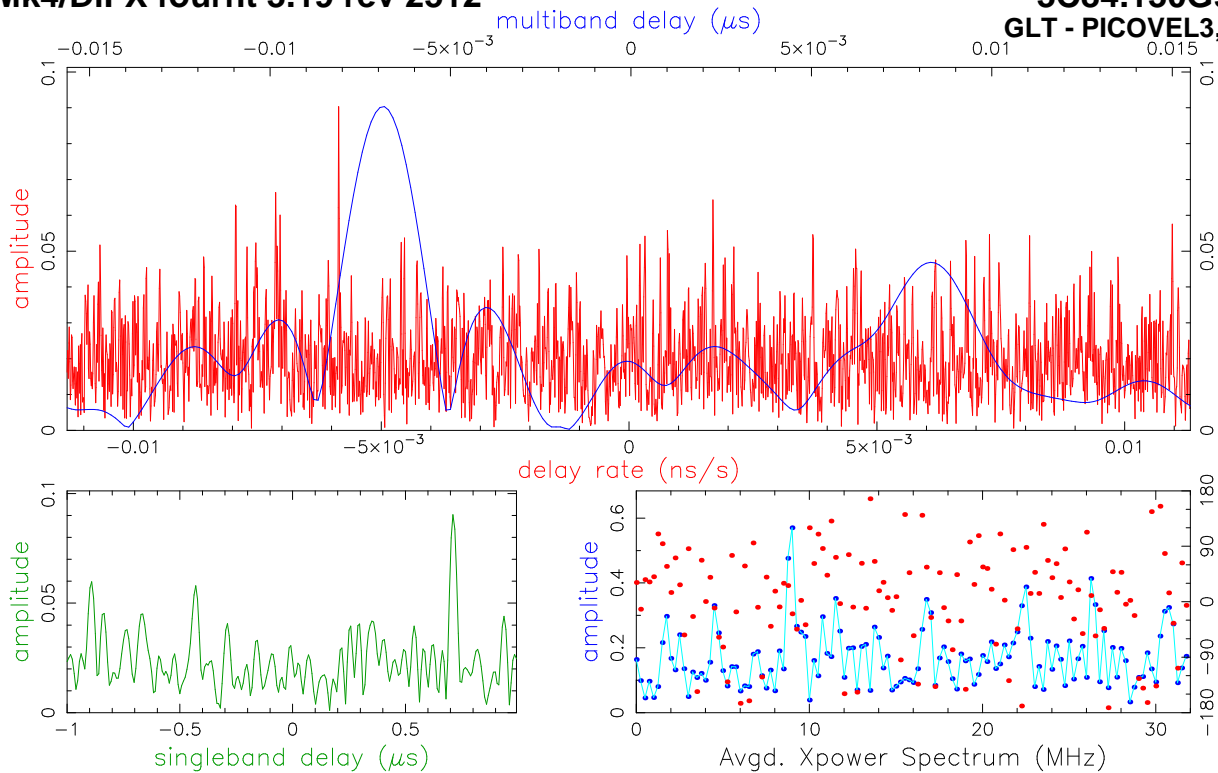


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | |
|-------------------------|----------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|--------------------|----------|----------|----------|----------|------------|----------------------|--------------|-------------|
| | -83.8 | -76.7 | -5.7 | -65.8 | -30.4 | -86.7 | -51.7 | -54.7 | -69.9 | -109.7 | -77.3 | -145.8 | -92.9 | -75.3 | -45.1 | -42.2 | | Phase | -71.1 | |
| | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | | Ampl. | 0.1 | |
| | 216.3 | 145.5 | 83.9 | 130.2 | 163.3 | 122.7 | 59.0 | 238.0 | 127.5 | 133.7 | 205.9 | 122.5 | 58.3 | 175.6 | 240.8 | 109.1 | | Sbd box | 129.4 | |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used | | |
| g | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | PC freqs | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | | |
| g:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase | | |
| g:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC | | |
| g | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | | |
| g | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | |
| g | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks | | |
| | | | | | | | | | | | | | | | | | | Chan ids | | |
| | | | | | | | | | | | | | | | | | | Tracks | | |
| Group delay (usec)(sbd) | | | 9.75840956591E+03 | | | | | | | | | 9.75839307167E+03 | | | | | | Resid mbdelay (usec) | -1.47558E-02 | +/- 1.5E-04 |
| Sband delay (usec) | | | 9.75839638067E+03 | | | | | | | | | 1.8364235E+00 | | | | | | Resid sbdelay (usec) | 3.30900E-03 | +/- 2.5E-03 |
| Phase delay (usec) | | | 9.75839306938E+03 | | | | | | | | | 4.2799997E-07 | | | | | | Resid phdelay (usec) | -2.29290E-06 | +/- 5.3E-07 |
| Delay rate (us/s) | | | 7.83588231978E-01 | | | | | | | | | 7.83588153565E-01 | | | | | | Resid rate (us/s) | 7.84125E-08 | +/- 1.9E-09 |
| Total phase (deg) | | | | | -1.4 | | | | | | | -2.41463241686E-05 | | | | | | Resid phase (deg) | -71.1 | +/- 16.3 |

ph/seg (deg) RMS Theor. Amplitude 0.117 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 76.9 28.2 Search (2048X64) 0.115 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 75.3 49.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 34.0 32.6 Inc. seg. avg. 0.140 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 35.3 56.9 Inc. frq. avg. 0.115 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
g: az 217.9 el 52.8 pa 10.1 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6043.794 829.981 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gi..130G9L Output file: /Exps/c192b/v2/1234/No0205/gi.W.199.130G9L

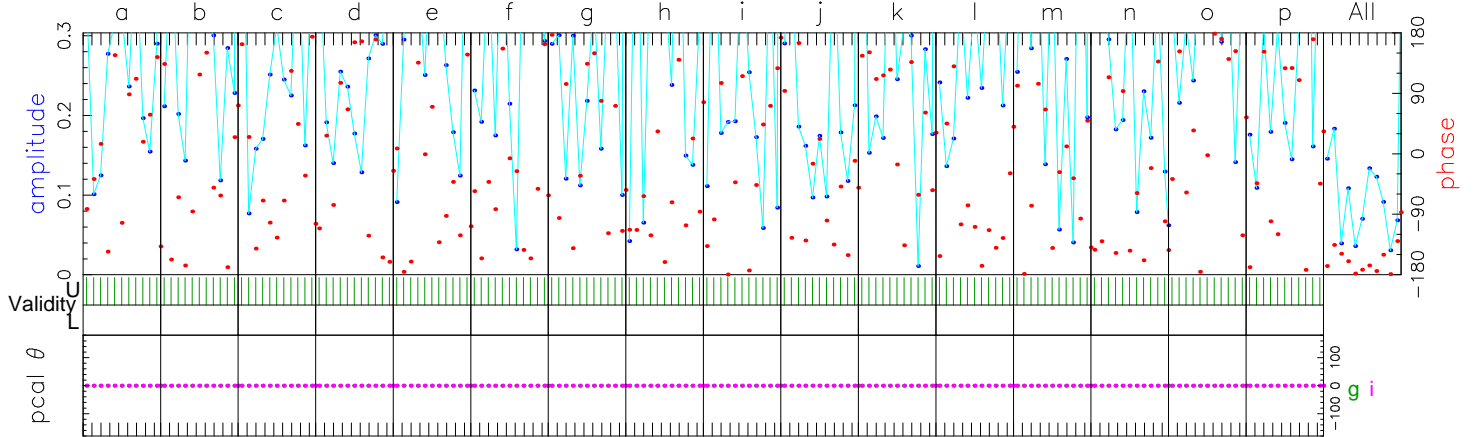
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gi
GLT - PICOVEL3, fgroup W, pol RL



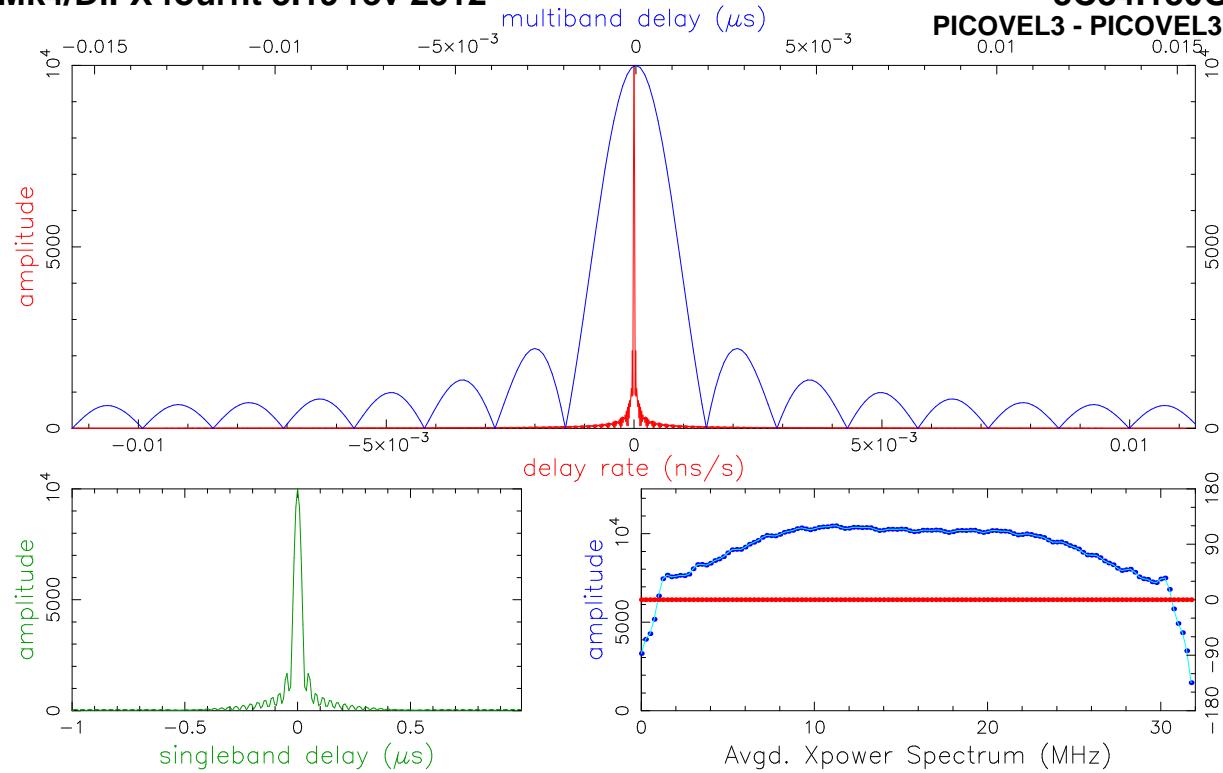
Fringe quality 0
SNR 5.4
Int time 479.684
Amp 0.101
Phase -157.4
PFD 1.0e+00
Delays (us)
SBD 0.711819
MBD -0.006863
Fringe rate (Hz)
-0.505530
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112356
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|--|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | |
| g | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| g:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| g:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| g | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| g | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| Group delay (usec)(sbd) | | 9.75910495891E+03 | | | | | | | | | | | | | | | | |
| Sband delay (usec) | | 9.75910489067E+03 | | | | | | | | | | | | | | | | |
| Phase delay (usec) | | 9.75839306659E+03 | | | | | | | | | | | | | | | | |
| Delay rate (us/s) | | 7.83582284862E-01 | | | | | | | | | | | | | | | | |
| Total phase (deg) | | | | | -87.7 | | | | | | | | | | | | | |
| 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): 64 | | | | | | | | | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | | | | | | | | | |
| PCal period (AP's) 5, 5 | | | | | | | | | | | | | | | | | | |
| sb window (us) | | | | | | | | | | | | | | | | | | |
| mb window (us) | | | | | | | | | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | | | | | | | | | |

ph/seg (deg) 16.7 36.6 Search (2048X64) 0.089 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 55.2 63.9 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.6 42.3 Inc. seg. avg. 0.088 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 46.8 73.8 Inc. frq. avg. 0.095 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 217.9 el 52.8 pa 10.1 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6043.794 829.981 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gi..130G9L Output file: /Exps/c192b/v2/1234/No0205/gi.W.221.130G9L

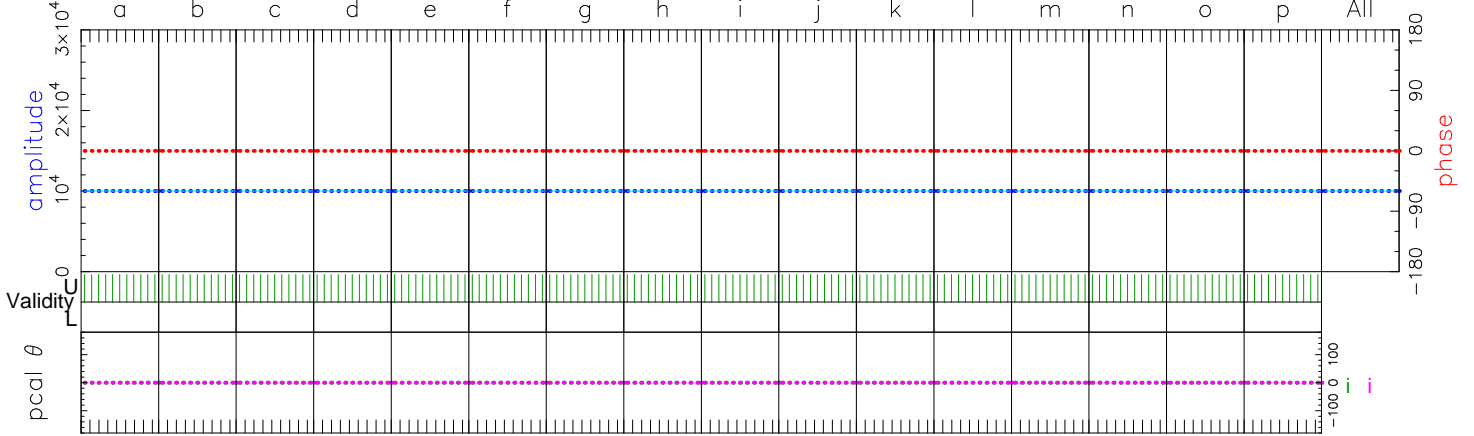


Fringe quality 9

SNR 599121.6
 Int time 479.993
 Amp 10000.001
 Phase -0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112340
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|---------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.0 | -0.0 | -0.0 | -0.0 | 0.0 | -0.0 | -0.0 | -0.0 | -0.0 | -0.0 | -0.0 | Phase | -0.0 |
| 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | 10000.0 | Ampl. | 10000.0 |
| 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | Sbd box | 129.0 |
| UL | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| ii | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | |
| iii | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC | |
| iiii | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Chan ids | |
| ii | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Tracks | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | |
| ii | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Tracks | |

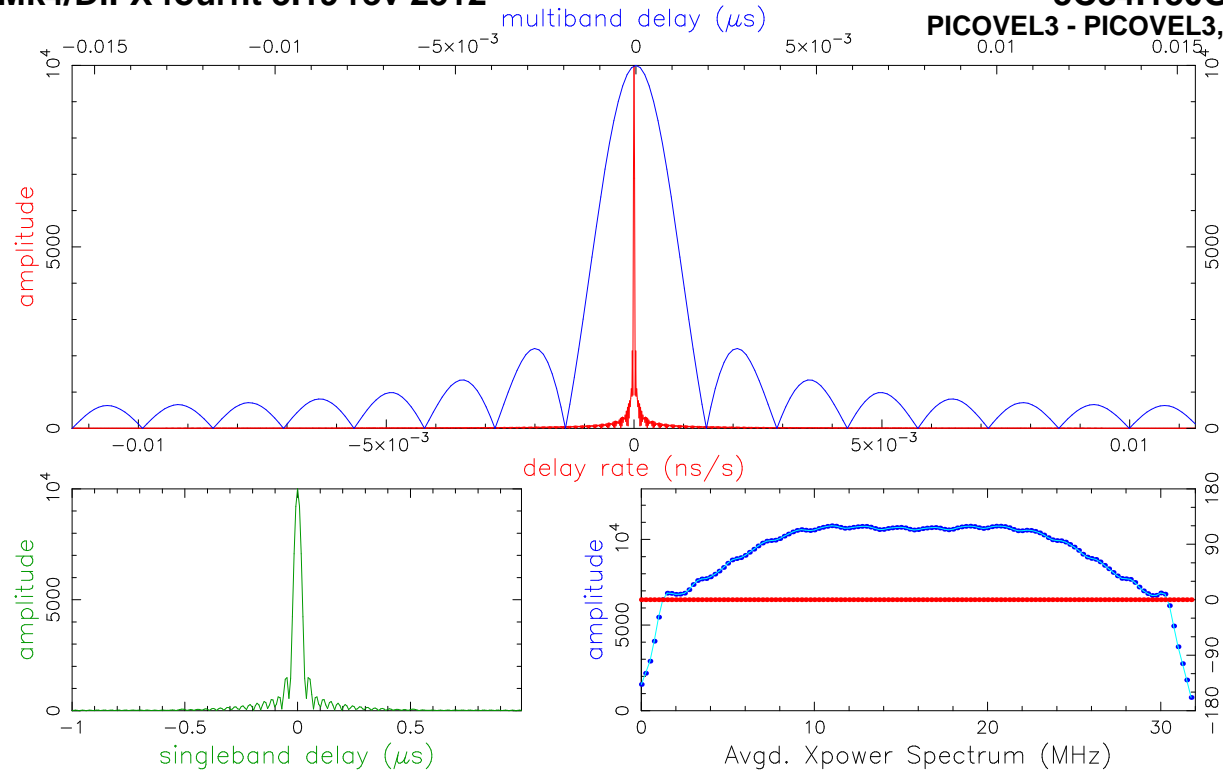
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.8E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.9E-08
 Phase delay (usec) -2.60256031443E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.60256E-20 +/- 6.2E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.2E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 10000.001 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 307.4 el 20.3 pa 58.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ii..130G9L Output file: /Exps/c192b/v2/1234/No0205/ii.W.172.130G9L

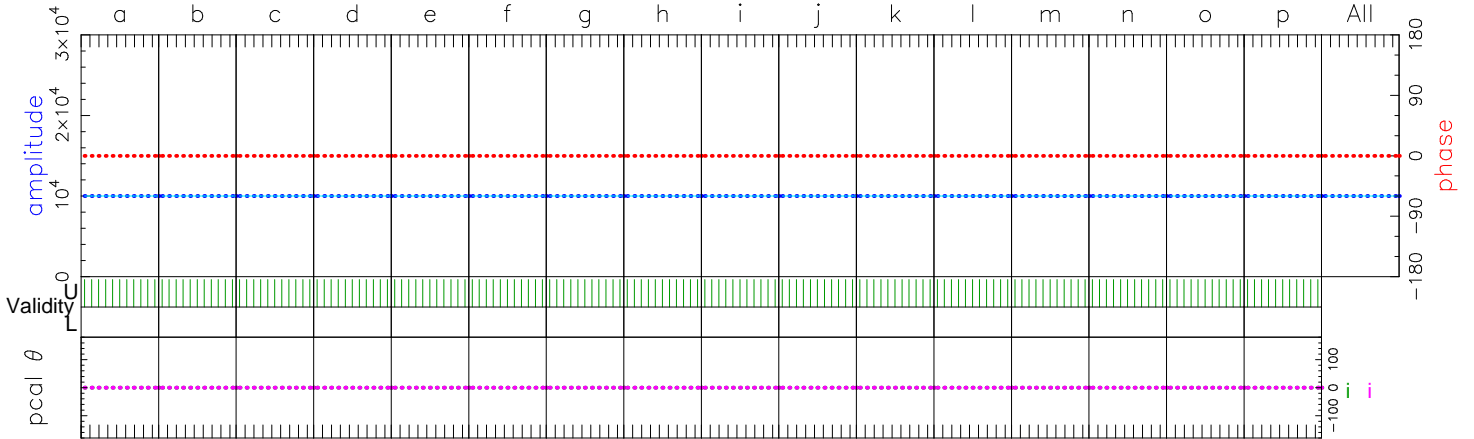
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ii
 PICOVEL3 - PICOVEL3, fgroup W, pol RR



Fringe quality 9
 SNR 599121.6
 Int time 479.993
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112346
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

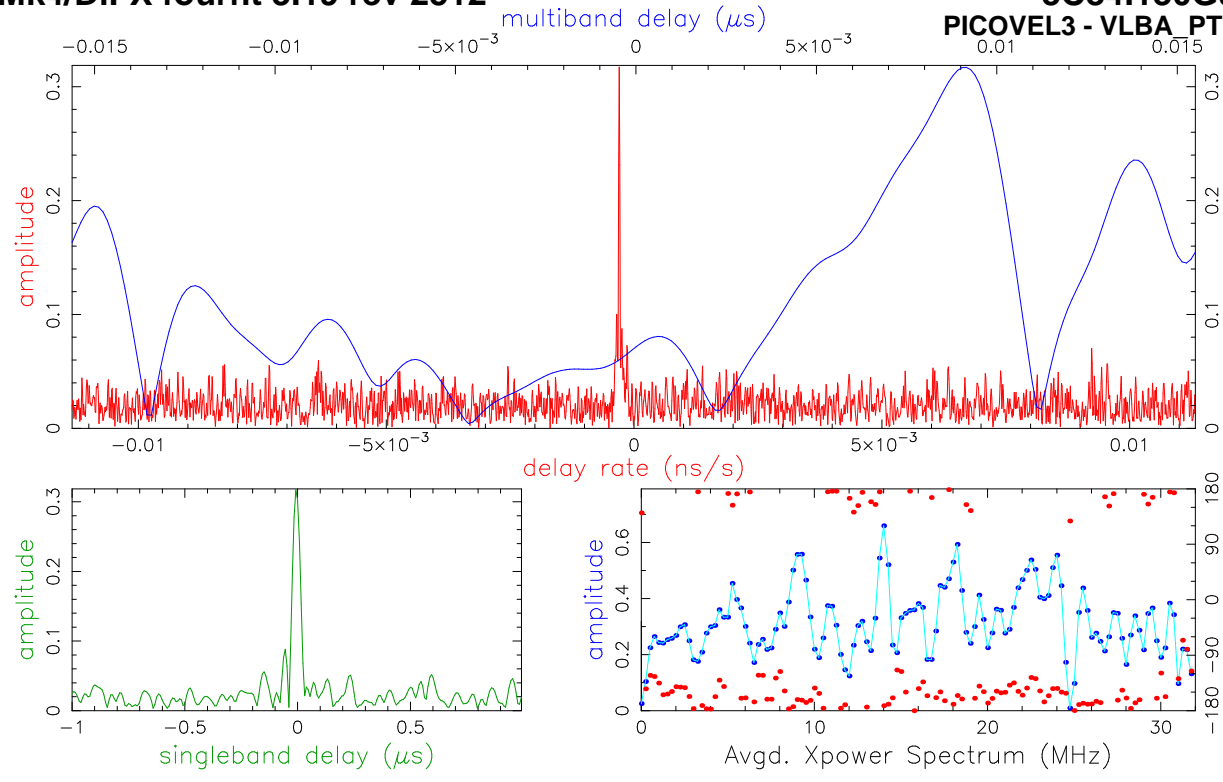


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | |
|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------|-------------|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | 10000.0 | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | 129.0 | |
| ii | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | 0.0 | |
| iii | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC | 0.0 | |
| iiii | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | 0.0 | |
| iiiii | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Chan ids | 0.0 | |
| iiiiii | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | W15UR | Tracks | 0.0 | |
| iiiii | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | W15UR | Chan ids | 0.0 | |
| iiiiiii | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | W15UR | Tracks | 0.0 | |
| 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 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0 | +/- 1.8E-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 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0 | +/- 2.9E-08 | |
| Phase delay (usec) | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 5.05315749264E-20 | 0.0 | +/- 6.2E-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 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0000000000E+00 | 0.0 | +/- 2.2E-14 | |
| Total phase (deg) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | +/- 0.0 |

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 i: az 307.4 el 20.3 pa 58.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ii..130G9L Output file: /Exps/c192b/v2/1234/No0205/ii.W.190.130G9L simultaneous interpolator

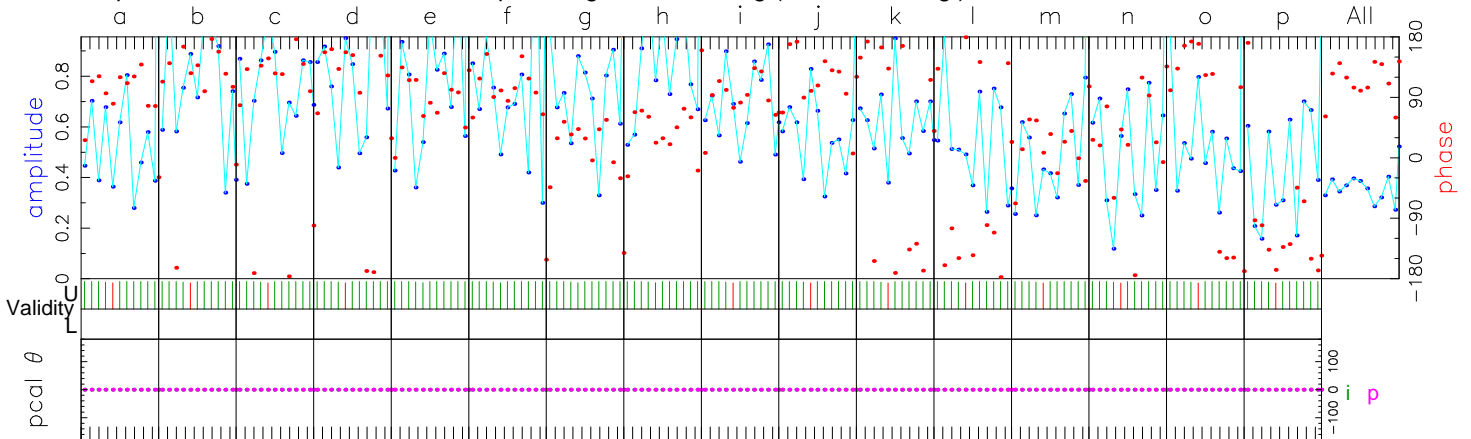
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ip
 PICOVEL3 - VLBA_PT, fgroup W, pol LL



Fringe quality 8
 SNR 19.0
 Int time 476.345
 Amp 0.319
 Phase 111.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.006050
 MBD 0.009111
 Fringe rate (Hz)
 -0.026034
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112340
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

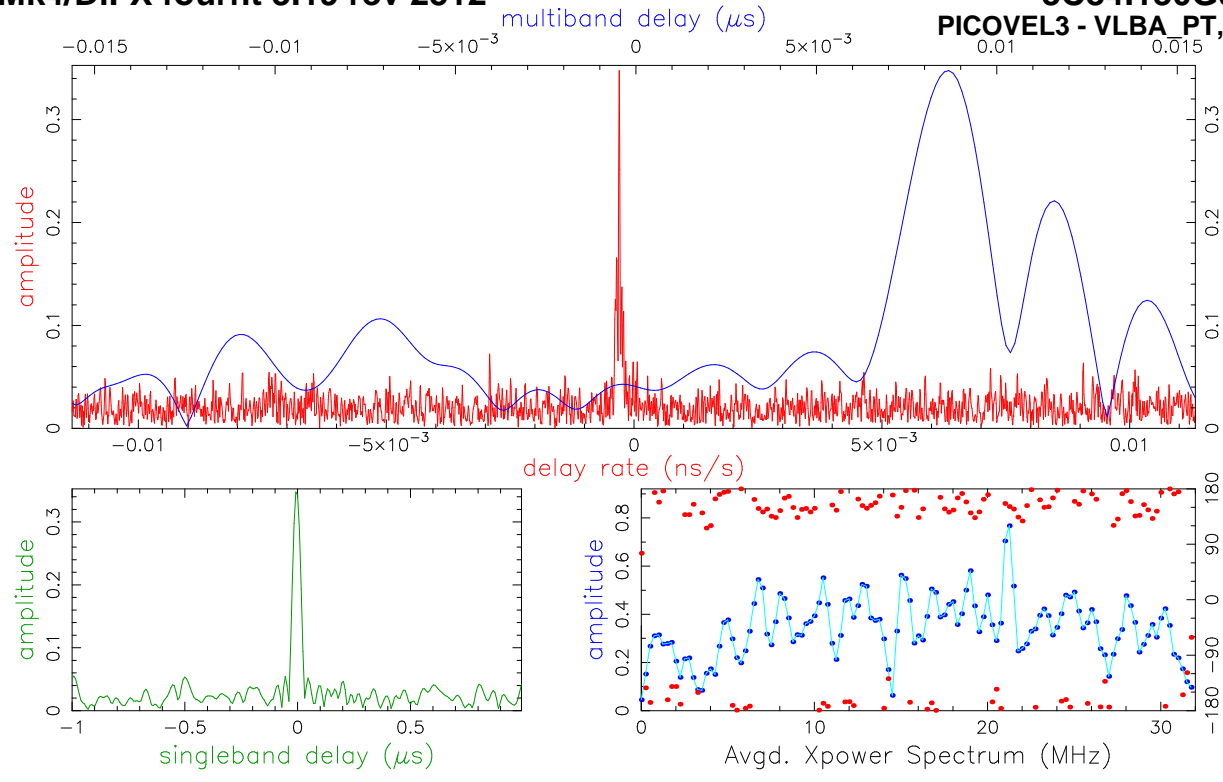


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|----------|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 111.1 | Phase | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 128.2 | Ampl. | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 128.2 | Sbd box | |
| ip | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 1000 | APs used | |
| ip | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Mani PC |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | PC amp | |
| p | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids | |
| | | | | | | | | | | | | | | | | | | Tracks | |
| | | | | | | | | | | | | | | | | | | Tracks | |

Group delay (usec)(sbd) -1.38233287706E+04 Apriori delay (usec) -1.38233378816E+04 Resid mbdelay (usec) 9.11105E-03 +/- 5.7E-05
 Sband delay (usec) -1.38233439316E+04 Apriori clock (usec) -1.2490074E+01 Resid sbdelay (usec) -6.05000E-03 +/- 9.1E-04
 Phase delay (usec) -1.38233378780E+04 Apriori clockrate (us/s) -5.5688657E-07 Resid phdelay (usec) 3.58266E-06 +/- 1.9E-07
 Delay rate (us/s) -1.06666509564E+00 Apriori rate (us/s) -1.06666479342E+00 Resid rate (us/s) -3.02225E-07 +/- 7.0E-10
 Total phase (deg) 67.2 Apriori accel (us/s/s) 7.63766848581E-05 Resid phase (deg) 111.1 +/- 6.0

RMS Theor. Amplitude 0.319 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 27.4 10.4 Search (2048X64) 0.307 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 17.0 18.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 64.6 12.1 Inc. seg. avg. 0.346 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 78.0 21.0 Inc. frq. avg. 0.520 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 307.4 el 20.3 pa 58.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 8293.491 5502.940 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ip..130G9L Output file: /Exps/c192b/v2/1234/No0205/ip.W.169.130G9L

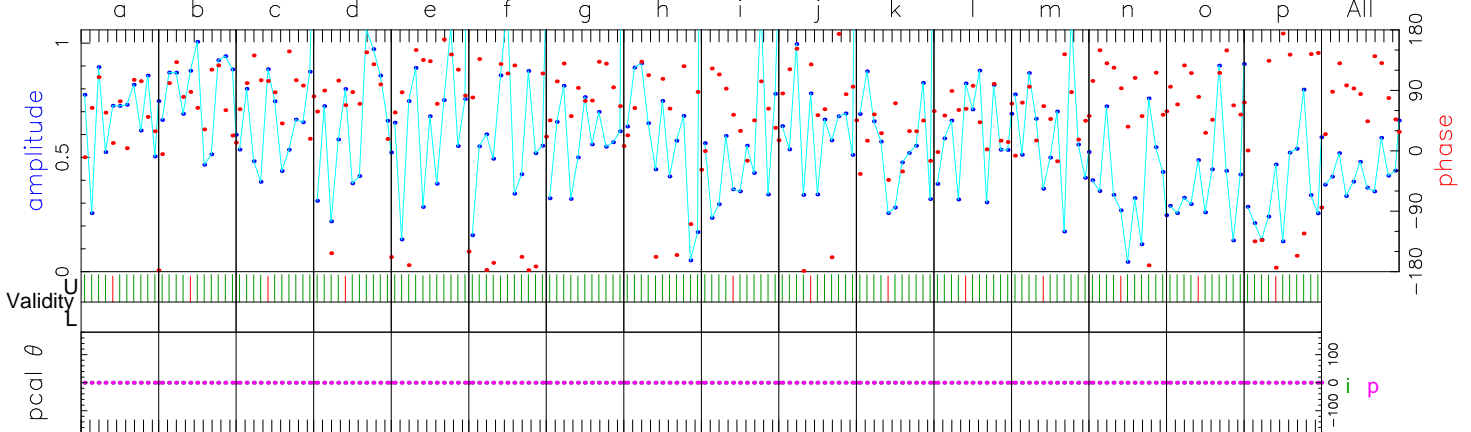


Fringe quality 7

SNR 21.0
 Int time 476.346
 Amp 0.353
 Phase 89.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.004585
 MBD 0.008661
 Fringe rate (Hz)
 -0.026161
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112345
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



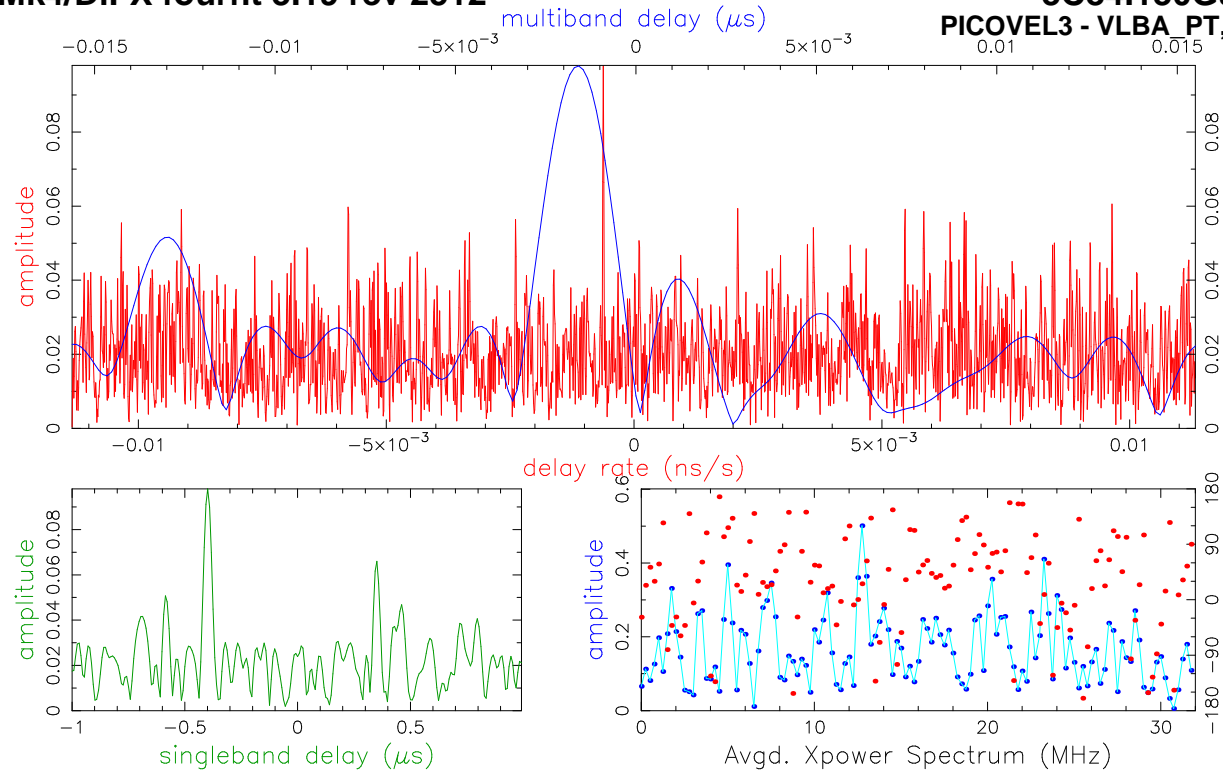
| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|--|----------|----------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| ip | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| ip | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | |
| p | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | |
| Group delay (usec)(sbd) | | | -1.38233292206E+04 | | | | | | | | | | | | | | | |
| Sband delay (usec) | | | -1.38233424671E+04 | | | | | | | | | | | | | | | |
| Phase delay (usec) | | | -1.38233378787E+04 | | | | | | | | | | | | | | | |
| Delay rate (us/s) | | | -1.06666509713E+00 | | | | | | | | | | | | | | | |
| Total phase (deg) | | | | 45.7 | | | | | | | | | | | | | | |
| 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): 64 | | | | | | | | | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | | | | | | | | | |
| nlags: 128 | | | | | | | | | | | | | | | | | | |
| t_cohere infinite | | | | | | | | | | | | | | | | | | |
| sb window (us) | | | | | | | | | | | | | | | | | | |
| mb window (us) | | | | | | | | | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | | | | | | | | | |
| pcal 5, 5 | | | | | | | | | | | | | | | | | | |
| pcal period (AP's) | | | | | | | | | | | | | | | | | | |
| sb window (us) | | | | | | | | | | | | | | | | | | |
| mb window (us) | | | | | | | | | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | | | | | | | | | |

i: az 307.4 el 20.3 pa 58.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 8293.491 5502.940

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ip..130G9L Output file: /Exps/c192b/v2/1234/No0205/ip.W.185.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ip
 PICOVEL3 - VLBA_PT, fgroup W, pol LR

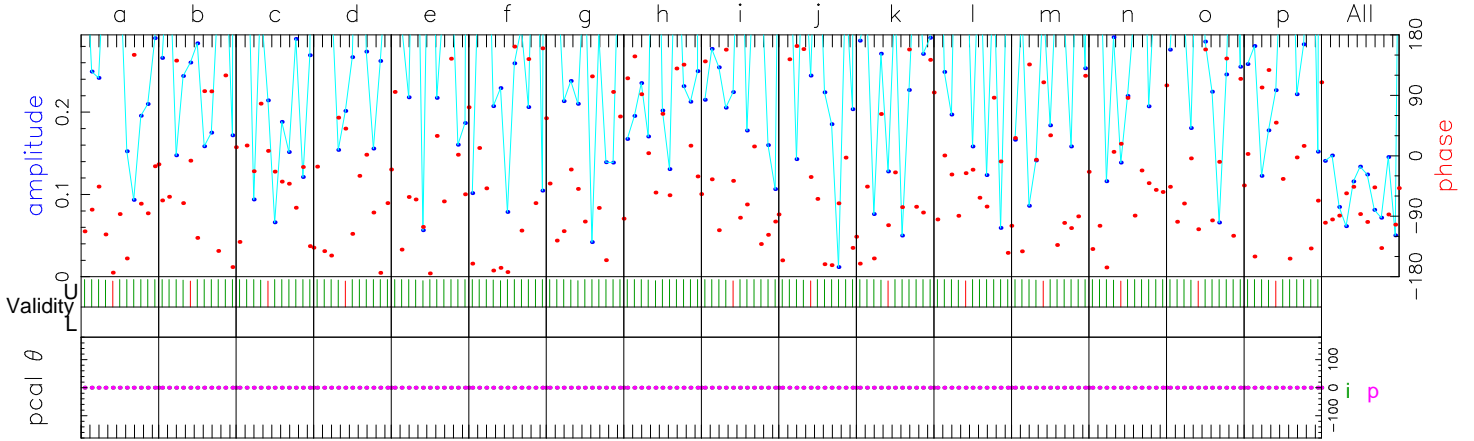


Fringe quality 0

SNR 5.8
 Int time 476.346
 Amp 0.098
 Phase -86.1
 PFD 7.3e-01
 Delays (us)
 SBD -0.398815
 MBD -0.001608
 Fringe rate (Hz)
 -0.053492
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112351
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | | | | |
|-------------------------|----------|----------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| | -99.9 | -115.4 | -45.2 | -68.7 | -105.0 | -102.1 | -66.8 | 33.8 | -89.1 | -149.1 | -90.9 | -65.6 | -122.8 | -55.7 | -106.0 | -94.7 | | Phase | -86.1 | | | | |
| | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | | Ampl. | 0.1 | | | | |
| | 76.9 | 117.1 | 199.6 | 174.8 | 14.6 | 48.3 | 132.1 | 197.8 | 169.2 | 129.2 | 60.4 | 111.1 | 245.1 | 79.2 | 51.1 | 104.5 | | Sbd box | 78.0 | | | | |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used | | | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | | | | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | | | | | |
| ip | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase | | | | | |
| ip | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | Mani PC | | | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | | | | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | | | | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids | | | | | |
| p | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks | | | | | |
| | | | | | | | | | | | | | | | | | | Chan ids | | | | | |
| | | | | | | | | | | | | | | | | | | Tracks | | | | | |
| Group delay (usec)(sbd) | | | -1.38237457397E+04 | | | | | | | | | | | | | | | Apriori delay (usec) | -1.38233378816E+04 | Resid mbdelay (usec) | -1.60804E-03 | +/- | 1.8E-04 |
| Sband delay (usec) | | | -1.38237366966E+04 | | | | | | | | | | | | | | | Apriori clock (usec) | -1.2490074E+01 | Resid sbdelay (usec) | -3.98815E-01 | +/- | 2.9E-03 |
| Phase delay (usec) | | | -1.38233378844E+04 | | | | | | | | | | | | | | | Apriori clockrate (us/s) | -5.5688657E-07 | Resid phdelay (usec) | -2.77567E-06 | +/- | 6.3E-07 |
| Delay rate (us/s) | | | -1.06666541440E+00 | | | | | | | | | | | | | | | Apriori rate (us/s) | -1.06666479342E+00 | Resid rate (us/s) | -6.20986E-07 | +/- | 2.3E-09 |
| Total phase (deg) | | | | | | | | | | | | | | | | | | Apriori accel (us/s/s) | 7.63766848581E-05 | Resid phase (deg) | -86.1 | +/- | 19.6 |

ph/seg (deg) 25.8 34.0
 amp/seg (%) 42.2 59.3
 ph/frq (deg) 42.7 39.2
 amp/frq (%) 51.1 68.5

RMS Theor. Amplitude 0.098 +/- 0.017
 Search (2048X64) 0.096
 Interp. 0.000
 Inc. seg. avg. 0.091
 Inc. frq. avg. 0.093

Group delay (usec)(sbd) -1.38237457397E+04
 Sband delay (usec) -1.38237366966E+04
 Phase delay (usec) -1.38233378844E+04
 Delay rate (us/s) -1.06666541440E+00
 Total phase (deg) -130.0

Apriori delay (usec) -1.38233378816E+04
 Apriori clock (usec) -1.2490074E+01
 Apriori clockrate (us/s) -5.5688657E-07
 Apriori rate (us/s) -1.06666479342E+00
 Apriori accel (us/s/s) 7.63766848581E-05

Resid mbdelay (usec) -1.60804E-03
 Resid sbdelay (usec) -3.98815E-01
 Resid phdelay (usec) -2.77567E-06
 Resid rate (us/s) -6.20986E-07
 Resid phase (deg) -86.1

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): 64
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

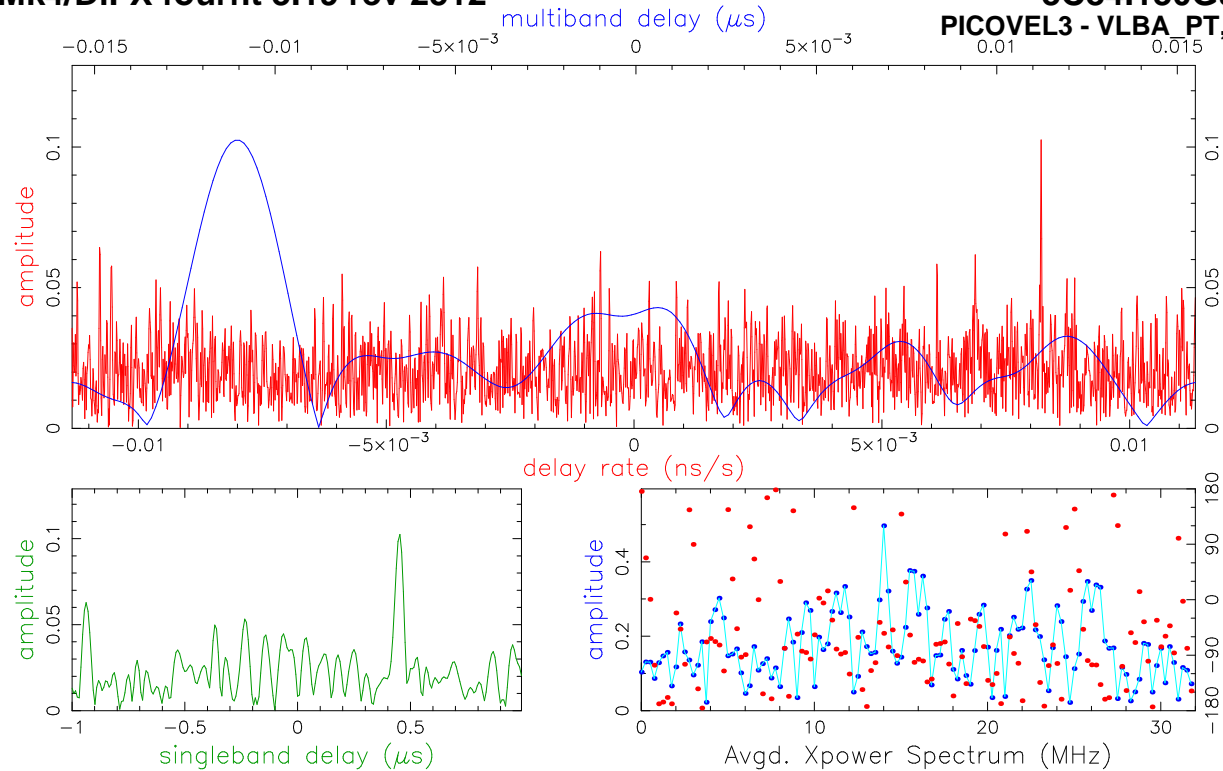
sb window (us) -1.000 1.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

i: az 307.4 el 20.3 pa 58.6
 p: az 43.4 el 79.5 pa -128.2
 u,v (fr/asec) 8293.491 5502.940

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ip..130G9L Output file: /Exps/c192b/v2/1234/No0205/ip.W.206.130G9L simultaneous interpolator

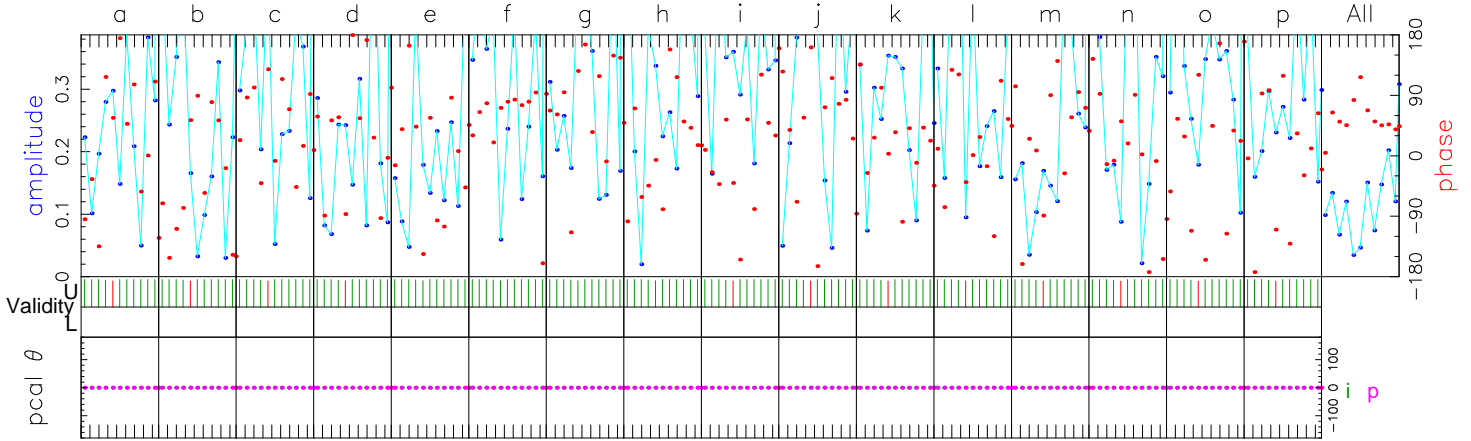
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ip
 PICOVEL3 - VLBA_PT, fgroup W, pol RL



Fringe quality 0
 SNR 6.1
 Int time 476.345
 Amp 0.129
 Phase 50.7
 PFD 2.0e-01
 Delays (us)
 SBD 0.451544
 MBD -0.011050
 Fringe rate (Hz)
 0.708714
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112357
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|
| 68.3 | -81.5 | 64.0 | 32.7 | -4.3 | 69.8 | 113.7 | 4.8 | 18.0 | 75.7 | 32.6 | 59.5 | 55.3 | 73.8 | 49.8 | 32.9 | 32.9 | 50.7 | Phase |
| 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Ampl. |
| 101.4 | 14.6 | 202.4 | 149.1 | 203.9 | 186.9 | 29.3 | 74.0 | 10.2 | 82.4 | 185.7 | 38.2 | 10.0 | 65.2 | 153.0 | 115.3 | 115.3 | 186.8 | Sbd box |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs |
| ip | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase |
| ip | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids |
| p | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks |

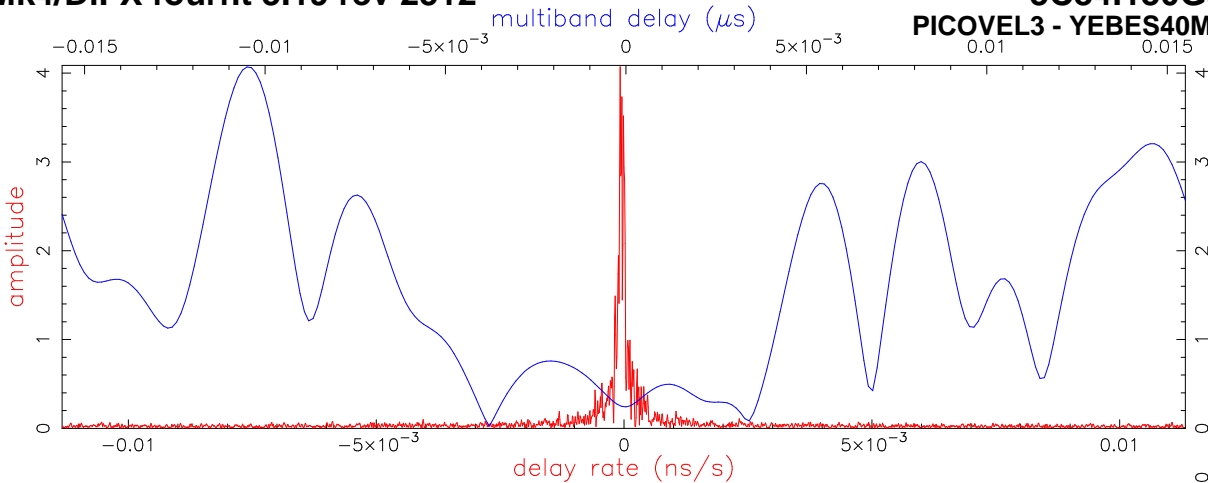
Group delay (usec)(sbd) -1.38228801818E+04 Apriori delay (usec) -1.38233378816E+04 Resid mbdelay (usec) -1.10502E-02 +/- 1.8E-04
 Sband delay (usec) -1.38228863381E+04 Apriori clock (usec) -1.2490074E+01 Resid sbdelay (usec) 4.51544E-01 +/- 2.8E-03
 Phase delay (usec) -1.38233378800E+04 Apriori clockrate (us/s) -5.5688657E-07 Resid phdelay (usec) 1.63629E-06 +/- 6.0E-07
 Delay rate (us/s) -1.06665656595E+00 Apriori rate (us/s) -1.06666479342E+00 Resid rate (us/s) 8.22746E-06 +/- 2.2E-09
 Total phase (deg) 6.9 Apriori accel (us/s/s) 7.63766848581E-05 Resid phase (deg) 50.7 +/- 18.7

RMS Theor. Amplitude 0.129 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 27.4 32.3 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 48.0 56.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 46.9 37.4 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 51.4 65.2 Inc. frq. avg. 0.133 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 307.4 el 20.3 pa 58.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 8293.491 5502.940 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ip..130G9L Output file: /Exps/c192b/v2/1234/No0205/ip.W.227.130G9L

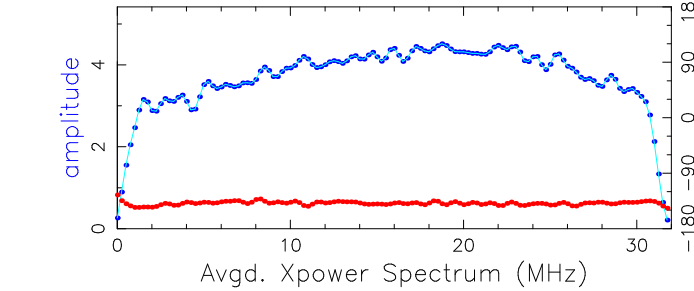
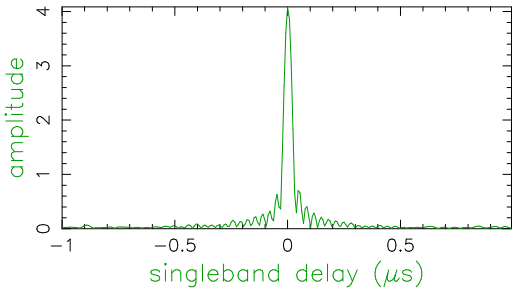
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, iY
 PICOVEL3 - YEBES40M, fgroup W, pol LL



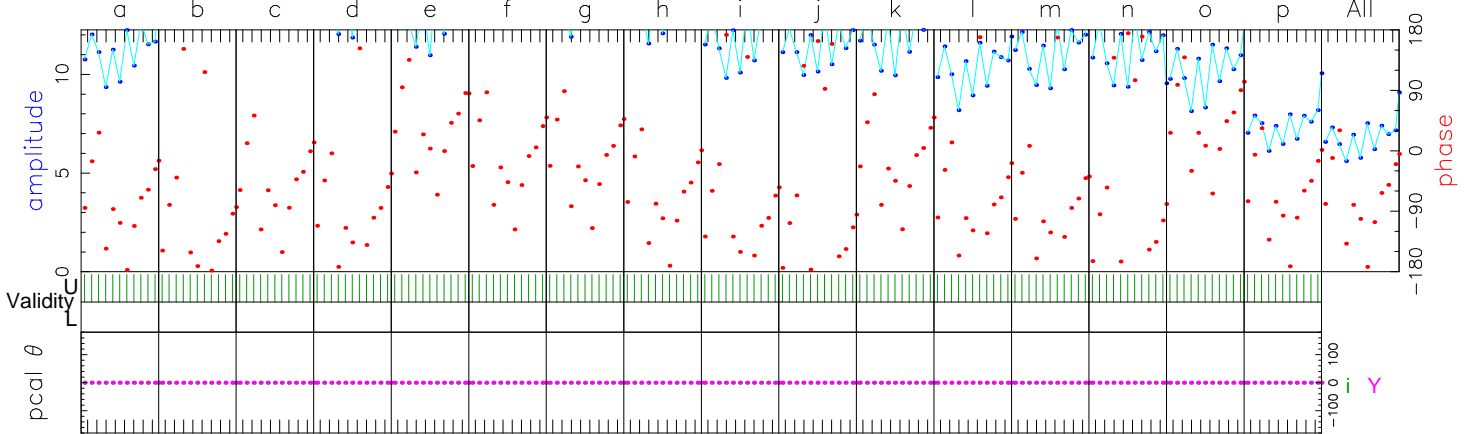
Fringe quality 1

SNR 240.2
 Int time 462.102
 Amp 4.087
 Phase -70.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.001457
 MBD -0.010457
 Fringe rate (Hz)
 -0.007055
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090017.41
 Stop 090759.74
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112342
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|-------|
| | -76.4 | -141.3 | -50.0 | -103.9 | 35.1 | -14.3 | -13.4 | -68.0 | -118.5 | -166.0 | -14.9 | -88.0 | -92.3 | -154.8 | 38.1 | -63.9 | | Phase | -70.0 |
| | 6.7 | 9.4 | 9.4 | 8.6 | 8.0 | 8.8 | 8.6 | 8.3 | 7.2 | 6.9 | 7.4 | 6.2 | 6.8 | 6.8 | 6.1 | 4.4 | | Ampl. | 7.5 |
| | 128.6 | 129.5 | 129.1 | 129.0 | 129.1 | 128.9 | 128.9 | 129.1 | 129.2 | 129.5 | 129.1 | 128.9 | 129.0 | 129.0 | 128.4 | 129.1 | | Sbd box | 129.2 |
| U/L | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | | APs used | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | |
| i:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase | |
| i:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids | |
| Y | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks | |

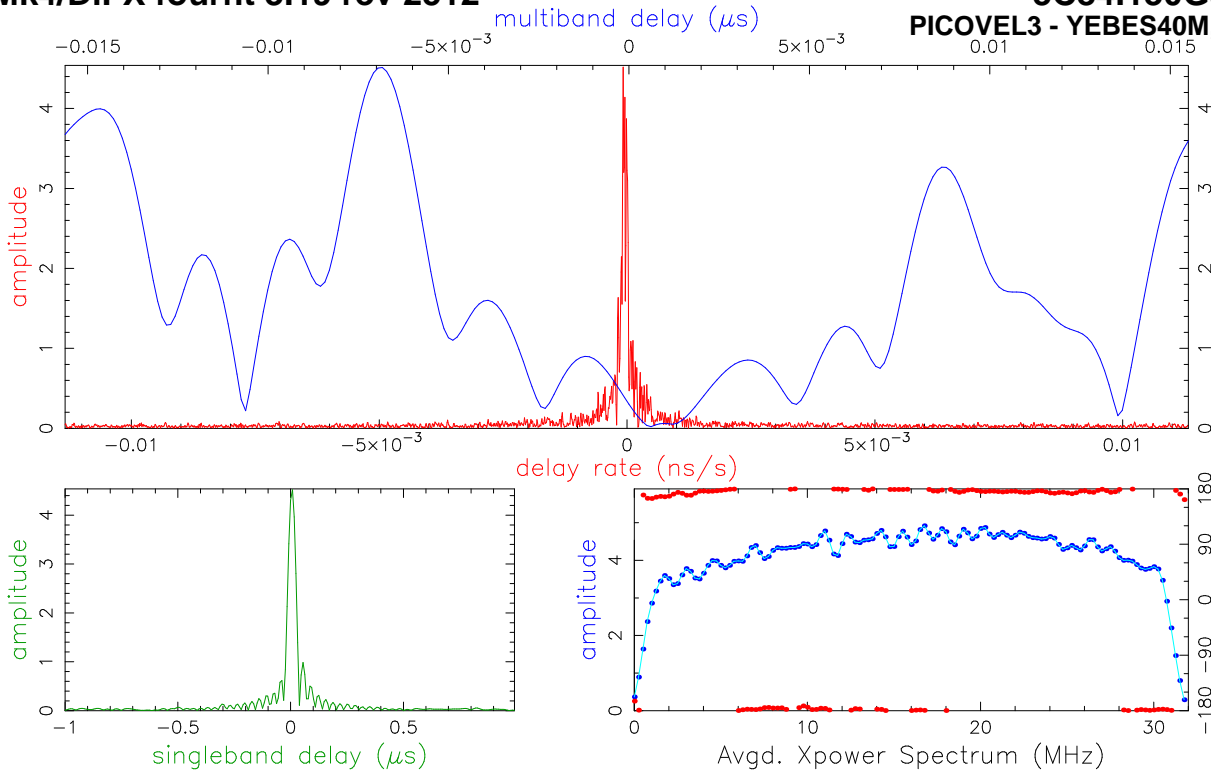
Group delay (usec)(sbd) -6.69799265259E+02 Apriori delay (usec) -6.69788808029E+02 Resid mbdelay (usec) -1.04572E-02 +/- 4.5E-06
 Sband delay (usec) -6.69787351529E+02 Apriori clock (usec) -1.0208384E+01 Resid sbdelay (usec) 1.45650E-03 +/- 7.2E-05
 Phase delay (usec) -6.69788810287E+02 Apriori clockrate (us/s) -5.7299998E-07 Resid phdelay (usec) -2.25795E-06 +/- 1.5E-08
 Delay rate (us/s) -4.43138334814E-02 Apriori rate (us/s) -4.43137515813E-02 Resid rate (us/s) -8.19000E-08 +/- 5.8E-11
 Total phase (deg) -42.5 Apriori accel (us/s/s) -1.54592677754E-09 Resid phase (deg) -70.0 +/- 0.5

RMS Theor. Amplitude 4.087 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 55.8 0.8 Search (2048X64) 3.764 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 66.4 1.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 64.6 1.0 Inc. seg. avg. 6.726 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 88.9 1.7 Inc. frq. avg. 7.480 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 307.4 el 20.3 pa 58.6 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) 339.821 -313.928 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/iY..130G9L Output file: /Exps/c192b/v2/1234/No0205/iY.W.175.130G9L

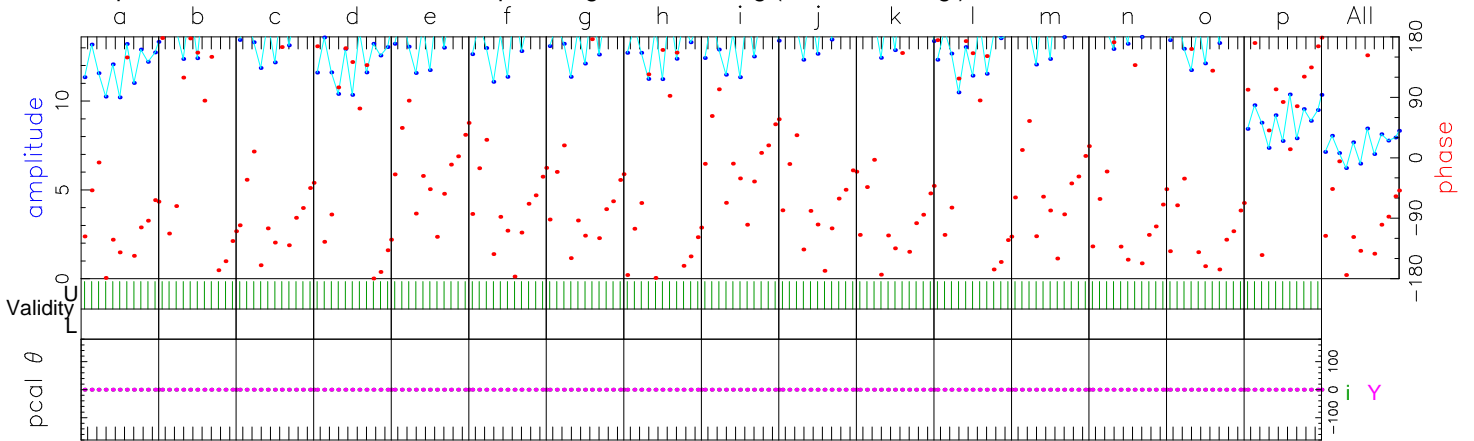
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, iY
PICOVEL3 - YEBES40M, fgroup W, pol RR



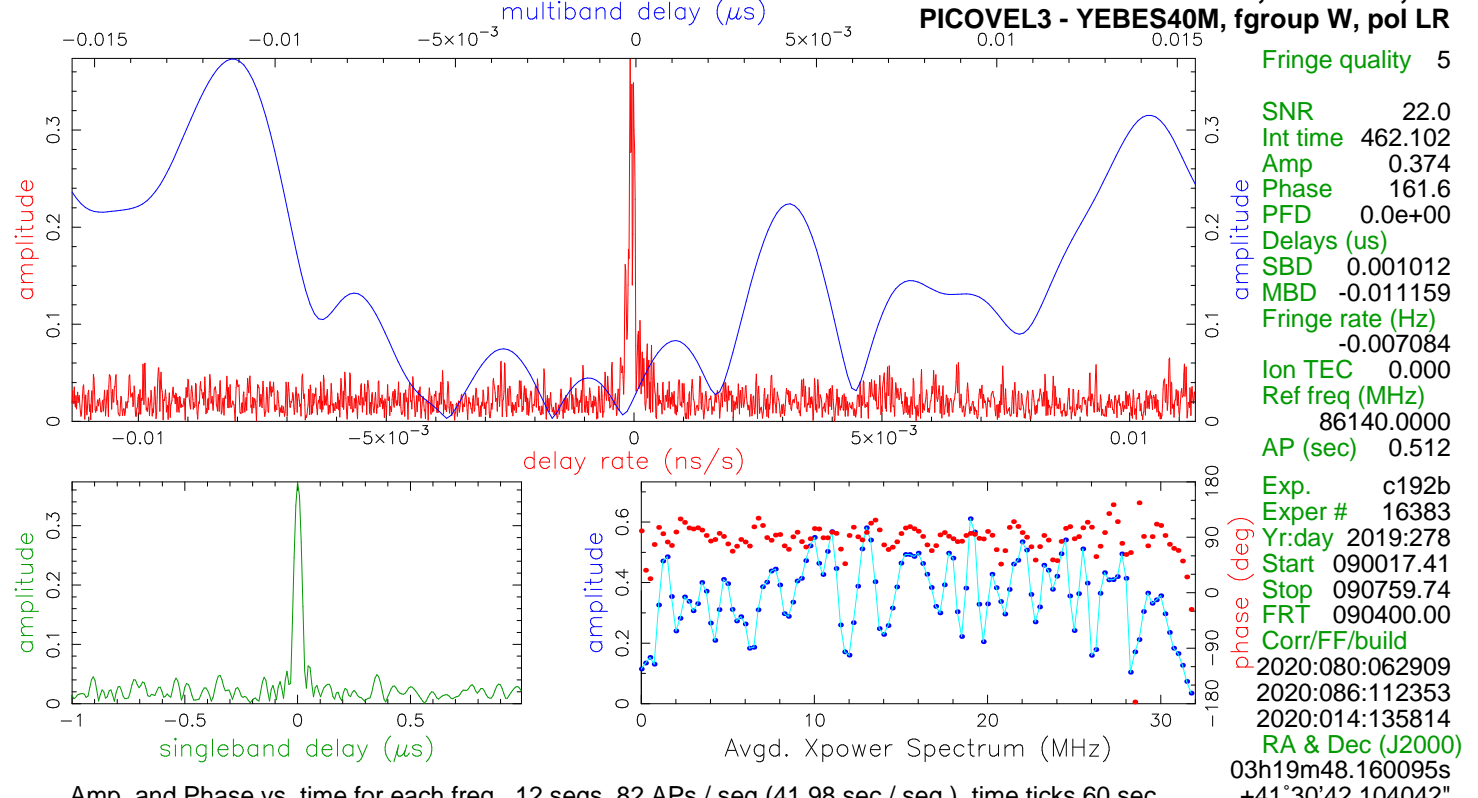
Fringe quality 1
SNR 266.8
Int time 462.102
Amp 4.539
Phase -107.5
PFD 0.0e+00
Delays (us)
SBD 0.006059
MBD -0.006888
Fringe rate (Hz)
-0.007051
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090017.41
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112348
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec

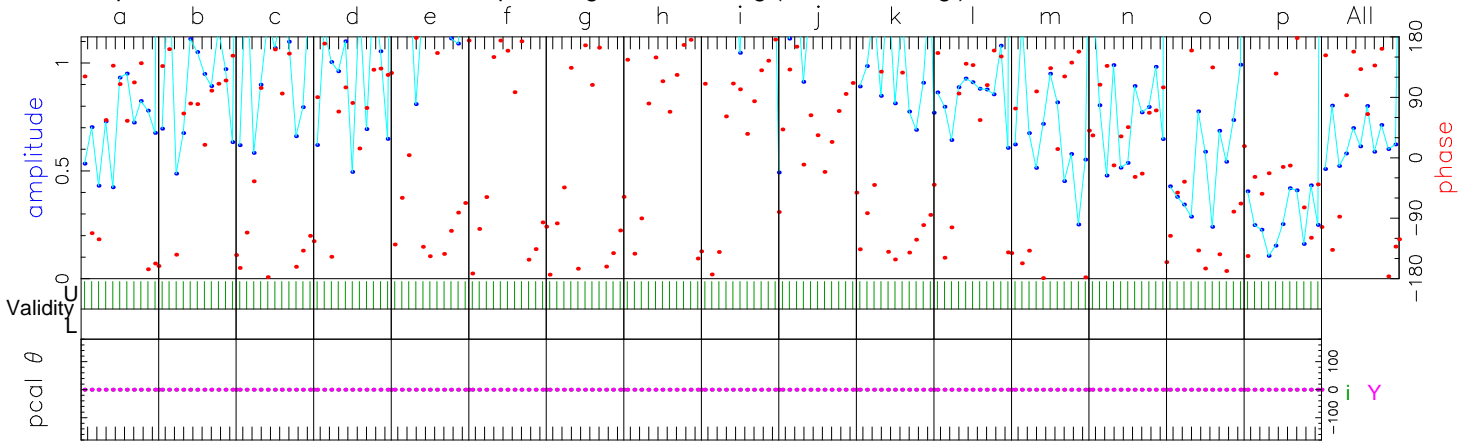


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-------------------------|----------|----------|--------------------|----------|----------|----------|----------|--------------------------|----------|----------|--------------------|----------|----------|----------------------|----------|----------|--------------|--------|---------|
| | -110.6 | -173.3 | -94.8 | 172.8 | -16.9 | -76.5 | -83.8 | -167.9 | 0.3 | -68.6 | -104.6 | -173.8 | -47.7 | -122.2 | -130.0 | 112.8 | Phase | -107.5 | |
| | 7.2 | 9.1 | 8.4 | 7.4 | 8.3 | 8.0 | 8.3 | 8.0 | 8.1 | 8.9 | 9.0 | 7.8 | 8.8 | 9.0 | 8.6 | 5.2 | Ampl. | 8.1 | |
| | 129.2 | 129.3 | 129.1 | 128.8 | 129.5 | 129.1 | 129.1 | 129.2 | 129.3 | 129.3 | 129.2 | 129.1 | 129.0 | 129.1 | 128.7 | 128.6 | Sbd box | 129.8 | |
| U/L | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | APs used | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| i:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | |
| i:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Chan ids | | |
| Y | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | | |
| | | | | | | | | | | | | | | | | | Chan ids | | |
| | | | | | | | | | | | | | | | | | Tracks | | |
| Group delay (usec)(sbd) | | | -6.69795696447E+02 | | | | | Apriori delay (usec) | | | -6.69788808029E+02 | | | Resid mbdelay (usec) | | | -6.88842E-03 | +/- | 4.0E-06 |
| Sband delay (usec) | | | -6.69782749529E+02 | | | | | Apriori clock (usec) | | | -1.0208384E+01 | | | Resid sbdelay (usec) | | | 6.05850E-03 | +/- | 6.5E-05 |
| Phase delay (usec) | | | -6.69788811495E+02 | | | | | Apriori clockrate (us/s) | | | -5.7299998E-07 | | | Resid phdelay (usec) | | | -3.46581E-06 | +/- | 1.4E-08 |
| Delay rate (us/s) | | | -4.43138334381E-02 | | | | | Apriori rate (us/s) | | | -4.43137515813E-02 | | | Resid rate (us/s) | | | -8.18568E-08 | +/- | 5.2E-11 |
| Total phase (deg) | | | | | | | | Apriori accel (us/s/s) | | | -1.54592677754E-09 | | | Resid phase (deg) | | | -107.5 | +/- | 0.4 |

ph/seg (deg) 55.6 0.7 Theor. Amplitude 4.539 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 66.0 1.3 Search (2048X64) 4.242 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 68.5 0.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 81.6 1.5 Inc. seg. avg. 7.453 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
i: az 307.4 el 20.3 pa 58.6 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) 339.821 -313.928 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/iY...130G9L Output file: /Exps/c192b/v2/1234/No0205/iY.W.193.130G9L simultaneous interpolator



Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec

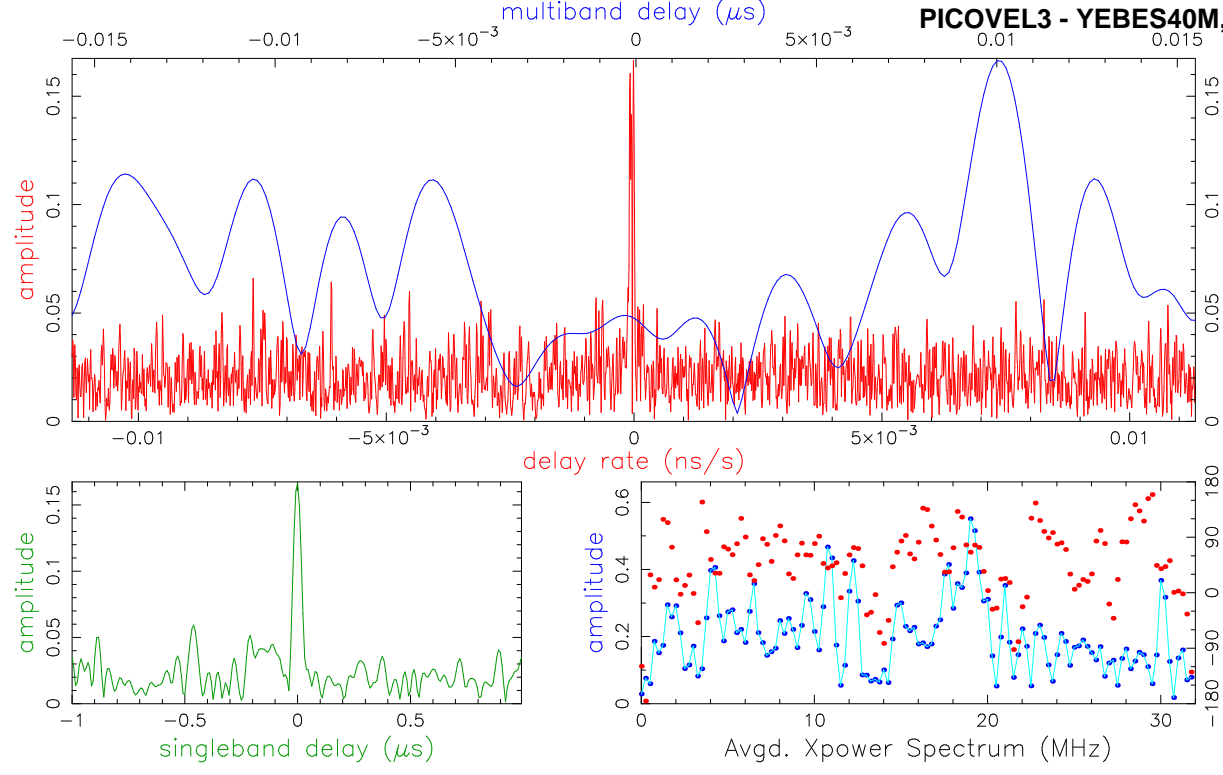


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| i:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| Y | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | |

| | | | | | | | |
|-------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec)(sbd) | -6.69799966853E+02 | Apriori delay (usec) | -6.69788808029E+02 | Resid mbdelay (usec) | -1.11588E-02 | +/- | 4.9E-05 |
| Sband delay (usec) | -6.69787796029E+02 | Apriori clock (usec) | -1.0208384E+01 | Resid sbdelay (usec) | 1.01200E-03 | +/- | 7.8E-04 |
| Phase delay (usec) | -6.69788802816E+02 | Apriori clockrate (us/s) | -5.7299998E-07 | Resid phdelay (usec) | 5.21271E-06 | +/- | 1.7E-07 |
| Delay rate (us/s) | -4.43138338215E-02 | Apriori rate (us/s) | -4.43137515813E-02 | Resid rate (us/s) | -8.22402E-08 | +/- | 6.3E-10 |
| Total phase (deg) | -170.8 | Apriori accel (us/s/s) | -1.5459267754E-09 | Resid phase (deg) | 161.6 | +/- | 5.2 |

| | | | | | | | | | | | | | | |
|--------------|-------|------------------|-------|-------------------|-------|--------------|-----------------------------|------------------------|----------------|------------------|--------|----------------|--------|-------|
| ph/seg (deg) | 57.7 | RMS | 76.7 | Theor. | 9.0 | Amplitude | 0.374 +/- 0.017 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 | sb window (us) | -1.000 | 1.000 |
| amp/seg (%) | 76.7 | Search (2048X64) | 0.350 | Interp. | 0.000 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | SampCntNorm: | enabled | mb window (us) | -0.016 | 0.016 | | |
| ph/frq (deg) | 70.2 | Inc. seg. avg. | 0.634 | Inc. frq. avg. | 0.645 | Bits/sample: | 2x2 | Sample rate (MSamp/s): | 64 | dr window (ns/s) | -0.011 | 0.011 | | |
| amp/frq (%) | 108.2 | Inc. frq. avg. | 0.645 | Data rate (Mb/s): | 2048 | nlags: | 128 | t_cohere: | infinite | ion window (TEC) | 0.00 | 0.00 | | |

i: az 307.4 el 20.3 pa 58.6 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) 339.821 -313.928 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/iY...130G9L Output file: /Exps/c192b/v2/1234/No0205/iY.W.214.130G9L

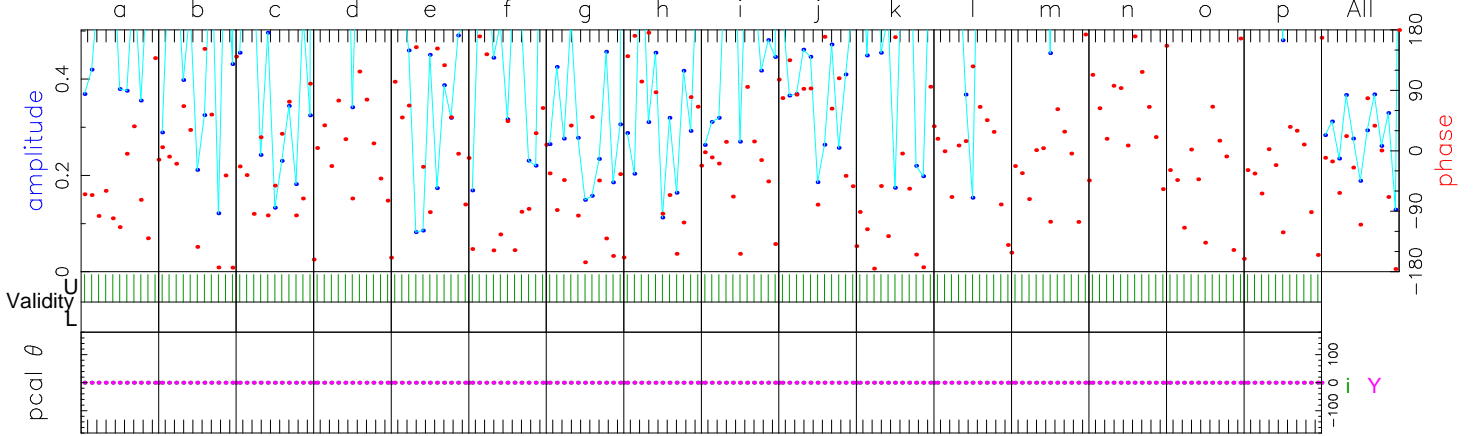


Fringe quality 9

SNR 9.8
Int time 462.102
Amp 0.167
Phase -9.5
PFD 3.0e-14
Delays (us)
SBD -0.001966
MBD 0.010062
Fringe rate (Hz)
-0.000866
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090017.41
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112357
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | | | | | |
|-------------------------|----------|----------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| | -81.1 | 11.8 | -47.1 | 22.7 | 51.9 | -178.9 | -64.3 | 115.9 | -17.0 | 77.9 | -104.8 | 1.7 | -13.6 | 66.2 | -49.1 | -27.8 | | Phase | -9.5 | | | | | |
| | 0.3 | 0.2 | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.5 | | Ampl. | 0.3 | | | | | |
| | 128.8 | 129.9 | 130.4 | 128.5 | 9.8 | 164.7 | 102.3 | 67.3 | 129.4 | 130.3 | 129.1 | 129.0 | 128.6 | 130.0 | 128.2 | 129.7 | | Sbd box | 128.7 | | | | | |
| U/L | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | 903/0 | | APs used | | | | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | | | | | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | | | | | | |
| i:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase | | | | | | |
| i:Y | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC | | | | | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | | | | | | |
| Y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | | | | | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids | | | | | | |
| Y | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks | | | | | | |
| | | | | | | | | | | | | | | | | | | | Tracks | | | | | |
| Group delay (usec)(sbd) | | | -6.69778746178E+02 | | | | | | | | | | | | | | | | Apriori delay (usec) | -6.69788808029E+02 | Resid mbdelay (usec) | 1.00619E-02 | +/- | 1.1E-04 |
| Sband delay (usec) | | | -6.69790774529E+02 | | | | | | | | | | | | | | | | Apriori clock (usec) | -1.0208384E+01 | Resid sbdelay (usec) | -1.96650E-03 | +/- | 1.7E-03 |
| Phase delay (usec) | | | -6.69788808337E+02 | | | | | | | | | | | | | | | | Apriori clockrate (us/s) | -5.7299998E-07 | Resid phdelay (usec) | -3.07771E-07 | +/- | 3.8E-07 |
| Delay rate (us/s) | | | -4.43137616358E-02 | | | | | | | | | | | | | | | | Apriori rate (us/s) | -4.43137515813E-02 | Resid rate (us/s) | -1.00544E-08 | +/- | 1.4E-09 |
| Total phase (deg) | | | | | -342.0 | | | | | | | | | | | | | | Apriori accel (us/s/s) | -1.54592677754E-09 | Resid phase (deg) | -9.5 | +/- | 11.6 |

ph/seg (deg) 71.1 20.2
amp/seg (%) 78.6 35.2
ph/frq (deg) 77.3 23.3
amp/frq (%) 101.2 40.6

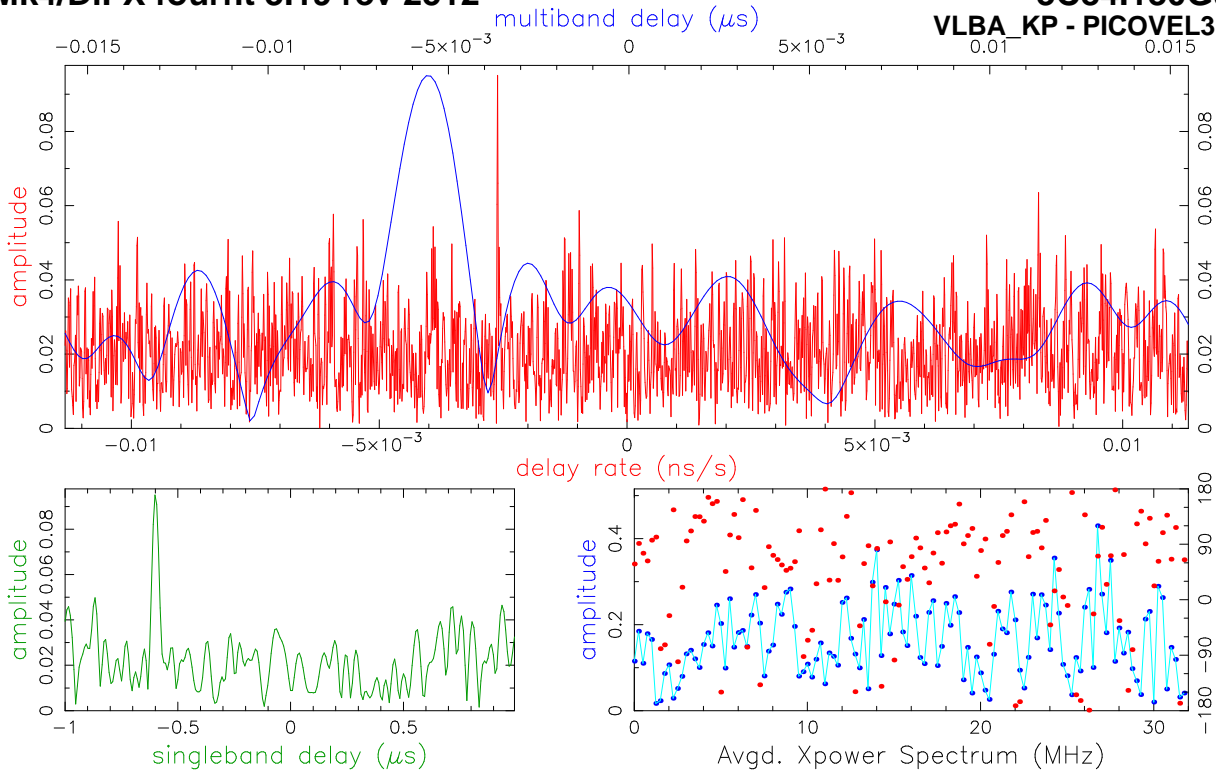
i: az 307.4 el 20.3 pa 58.6
Y: az 306.5 el 22.2 pa 56.2
u,v (fr/asec) 339.821 -313.928

Control file: cf_1234_gmva
Input file: /Exps/c192b/v2/1234/No0205/iY...130G9L
Output file: /Exps/c192b/v2/1234/No0205/iY.W.230.130G9L

simultaneous interpolator

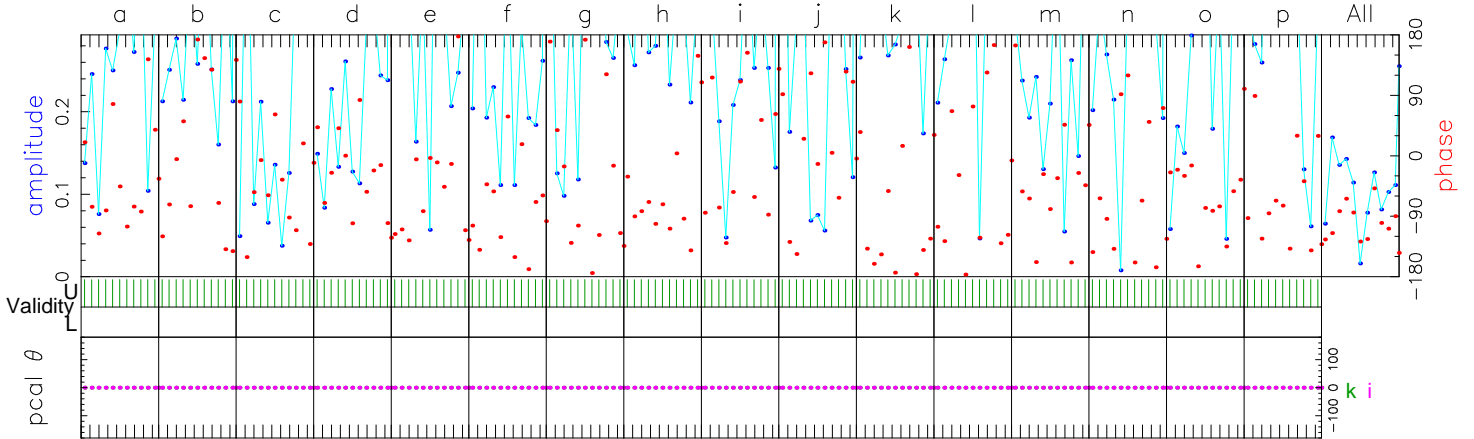
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ki
VLBA_KP - PICOVEL3, fgroup W, pol LL



Fringe quality 0
SNR 5.7
Int time 477.909
Amp 0.098
Phase -92.1
PFD 9.3e-01
Delays (us)
SBD -0.599547
MBD -0.005538
Fringe rate (Hz)
-0.225073
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112342
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

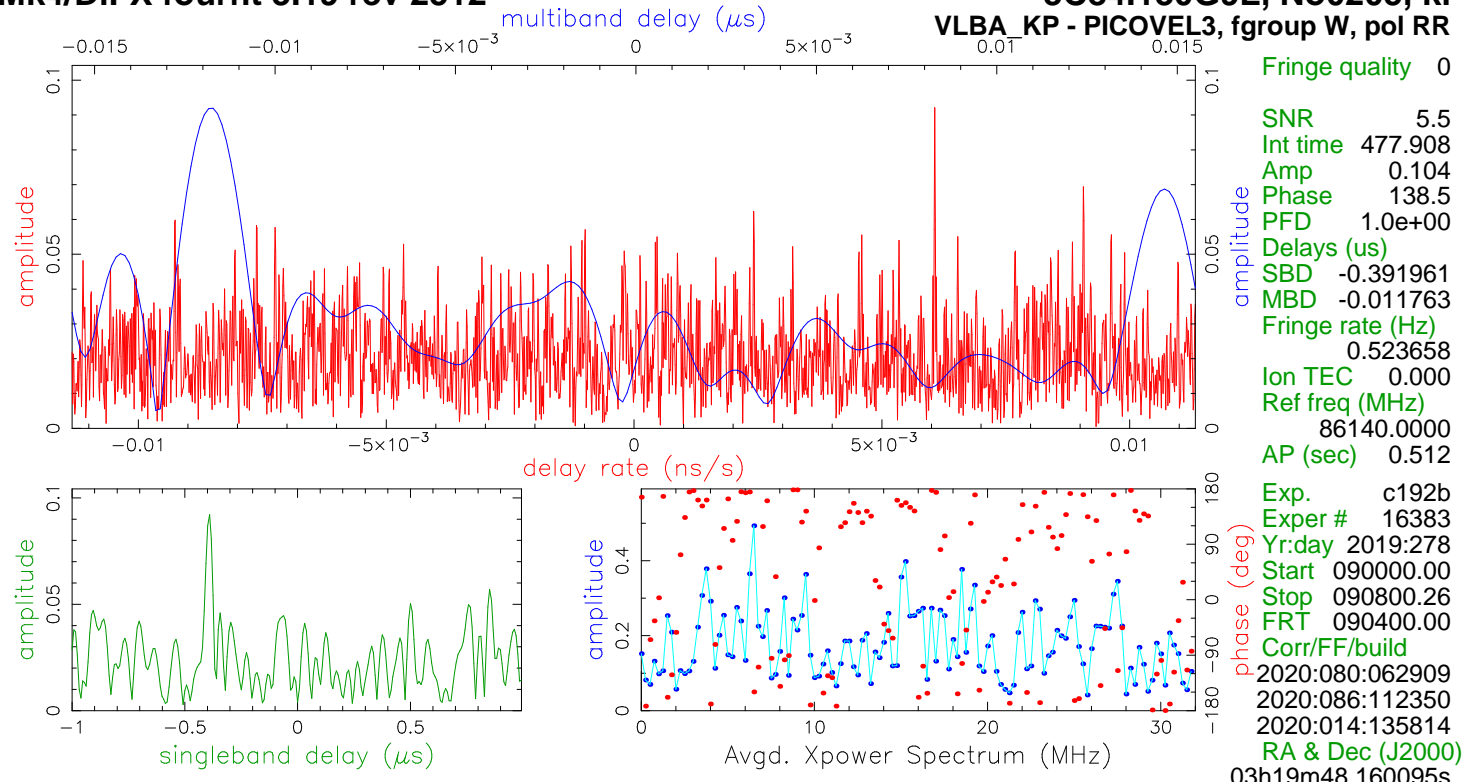


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| | -64.1 | -138.4 | -93.5 | -26.7 | -80.0 | -83.2 | -150.5 | -83.5 | -110.9 | 46.1 | -147.9 | -171.7 | -68.5 | -124.6 | -60.7 | -73.8 | Phase | -92.1 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | Ampl. | 0.1 |
| | 223.2 | 255.5 | 151.8 | 1.9 | 18.5 | 255.0 | 55.1 | 52.5 | 121.9 | 105.0 | 162.7 | 252.3 | 230.4 | 176.5 | 19.4 | 240.7 | Sbd box | 52.3 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| ki | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| ki | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Tracks | |

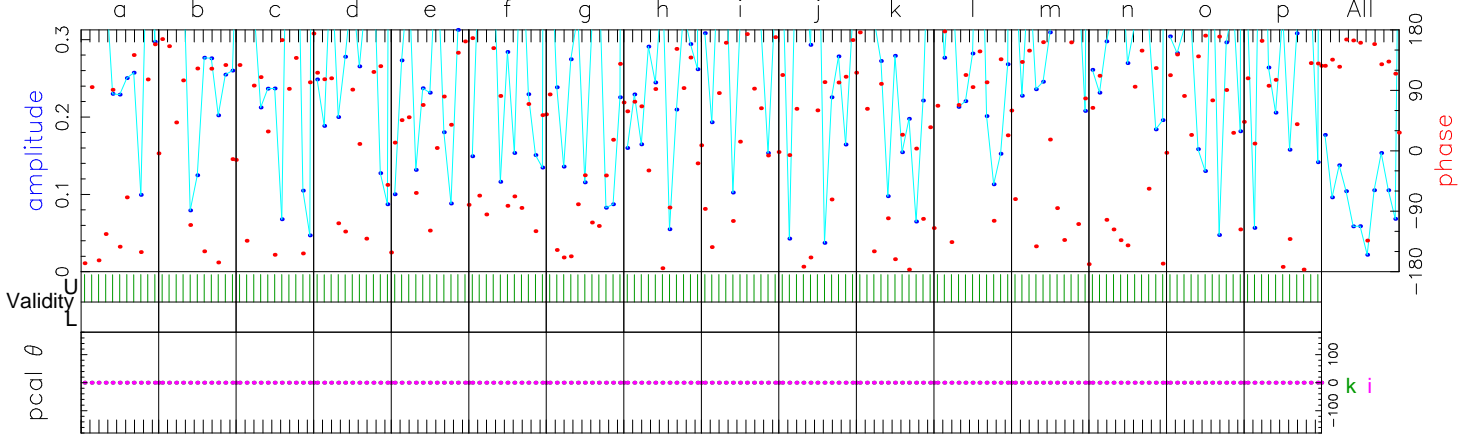
Group delay (usec)(sbd) 1.35286451004E+04 Apriori delay (usec) 1.35292443880E+04 Resid mbdelay (usec) -5.53762E-03 +/- 1.9E-04
 Sband delay (usec) 1.35286448410E+04 Apriori clock (usec) 1.2700951E-01 Resid sbdelay (usec) -5.99547E-01 +/- 3.0E-03
 Phase delay (usec) 1.35292443850E+04 Apriori clockrate (us/s) 1.5842101E-07 Resid phdelay (usec) -2.97012E-06 +/- 6.5E-07
 Delay rate (us/s) 1.12964953658E+00 Apriori rate (us/s) 1.12965214946E+00 Resid rate (us/s) -2.61288E-06 +/- 2.3E-09
 Total phase (deg) 118.0 Apriori accel (us/s/s) -7.74458072466E-05 Resid phase (deg) -92.1 +/- 20.0

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 43.8 el 75.8 pa -127.2 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -8776.990 -5800.015 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ki..130G9L Output file: /Exps/c192b/v2/1234/No0205/ki.W.173.130G9L



Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

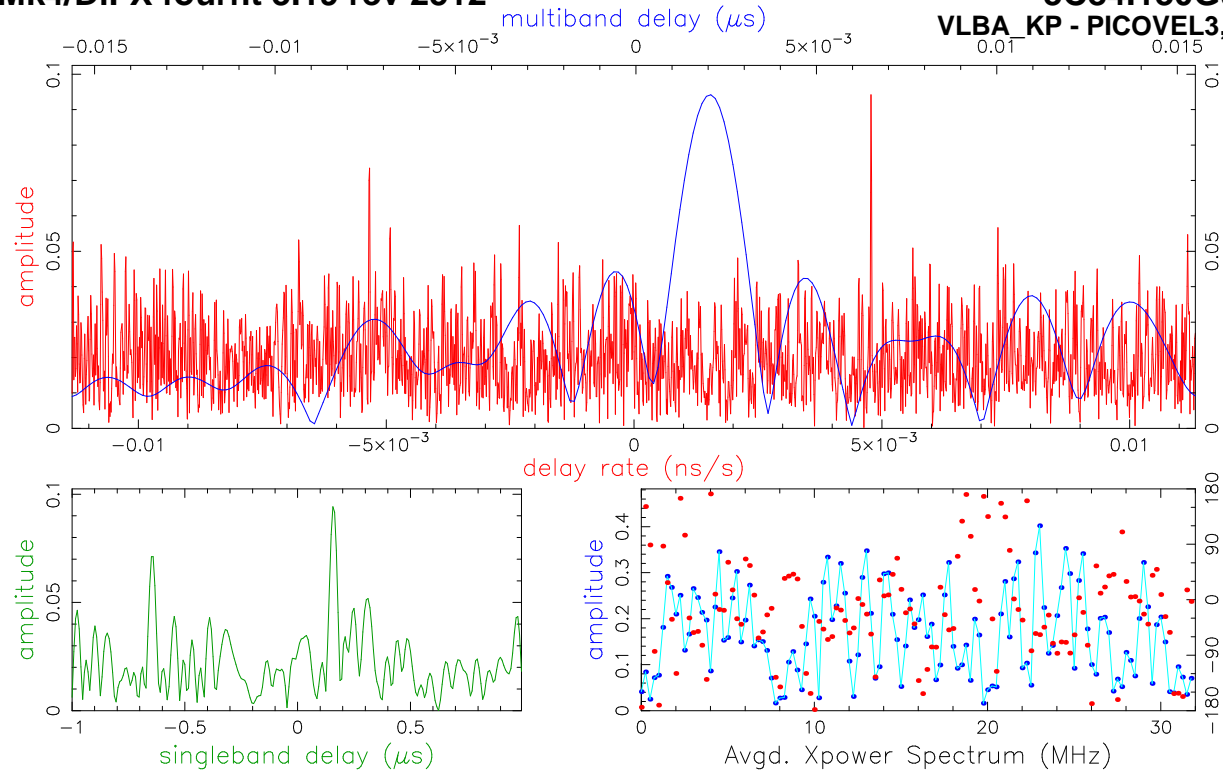


| | | | | | | | | | | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|--|
| 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
| 171.2 | 130.3 | 126.9 | 128.4 | 59.9 | -96.0 | -131.2 | 91.9 | 122.5 | 114.9 | 138.5 | 120.5 | -150.5 | -167.8 | 86.9 | 141.3 | Phase | 138.5 | |
| 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | Ampl. | 0.1 | |
| 248.6 | 241.5 | 78.6 | 83.2 | 126.8 | 38.9 | 13.2 | 105.9 | 94.2 | 187.4 | 12.8 | 91.9 | 75.6 | 146.6 | 57.6 | 230.8 | Sbd box | 78.8 | |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | | |
| ki | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | |

Group delay (usec)(sbd) 1.35288576248E+04 Apriori delay (usec) 1.35292443880E+04 Resid mbdelay (usec) -1.17632E-02 +/- 2.0E-04
 Sband delay (usec) 1.35288524270E+04 Apriori clock (usec) 1.2700951E-01 Resid sbdelay (usec) -3.91961E-01 +/- 3.1E-03
 Phase delay (usec) 1.35292443925E+04 Apriori clockrate (us/s) 1.5842101E-07 Resid phdelay (usec) 4.46783E-06 +/- 6.7E-07
 Delay rate (us/s) 1.12965822861E+00 Apriori rate (us/s) 1.12965214946E+00 Resid rate (us/s) 6.07915E-06 +/- 2.4E-09
 Total phase (deg) 348.6 Apriori accel (us/s/s) -7.74458072466E-05 Resid phase (deg) 138.5 +/- 20.8

ph/seg (deg) RMS Theor. Amplitude 0.104 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.8 62.7 Search (2048X64) 0.090 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.9 41.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 64.4 72.5 Inc. seg. avg. 0.094 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.117 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 43.8 el 75.8 pa -127.2 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -8776.990 -5800.015 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ki..130G9L Output file: /Exps/c192b/v2/1234/No0205/ki.W.200.130G9L

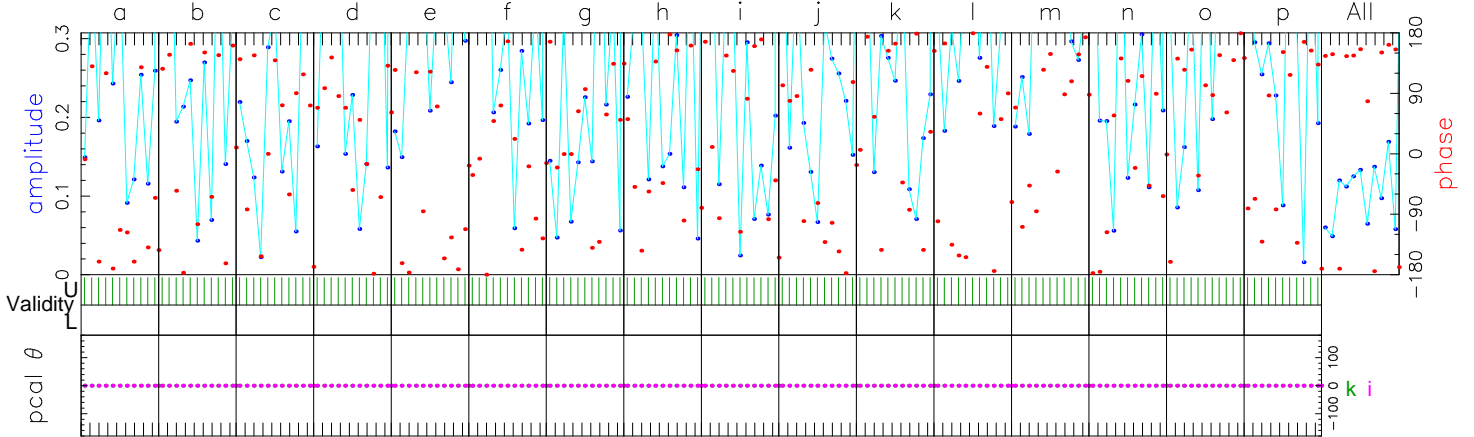


Fringe quality 0

SNR 5.7
Int time 477.909
Amp 0.102
Phase 157.3
PFD 9.6e-01
Delays (us)
SBD 0.158921
MBD 0.002085
Fringe rate (Hz)
0.412944
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:62909
2020:086:112355
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|--|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| ki | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | |
| Group delay (usec)(sbd) | | 1.35294027233E+04 | | | | | | | | | | | | | | | | |
| Sband delay (usec) | | 1.35294033090E+04 | | | | | | | | | | | | | | | | |
| Phase delay (usec) | | 1.35292443931E+04 | | | | | | | | | | | | | | | | |
| Delay rate (us/s) | | 1.12965694333E+00 | | | | | | | | | | | | | | | | |
| Total phase (deg) | | | | | 7.3 | | | | | | | | | | | | | |
| 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) | | | | | | | | | | | | | | | | | | |
| PCal period (AP's) 5, 5 | | | | | | | | | | | | | | | | | | |
| sb window (us) | | | | | | | | | | | | | | | | | | |
| mb window (us) | | | | | | | | | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | | | | | | | | | |

ph/seg (deg) 28.0 34.9
amp/seg (%) 42.2 60.9
ph/frq (deg) 41.1 40.3
amp/frq (%) 57.6 70.3

RMS Theor. Amplitude 0.102 +/- 0.018
Search (2048X64) 0.093
Interp. 0.000
Inc. seg. avg. 0.094
Inc. frq. avg. 0.094

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): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

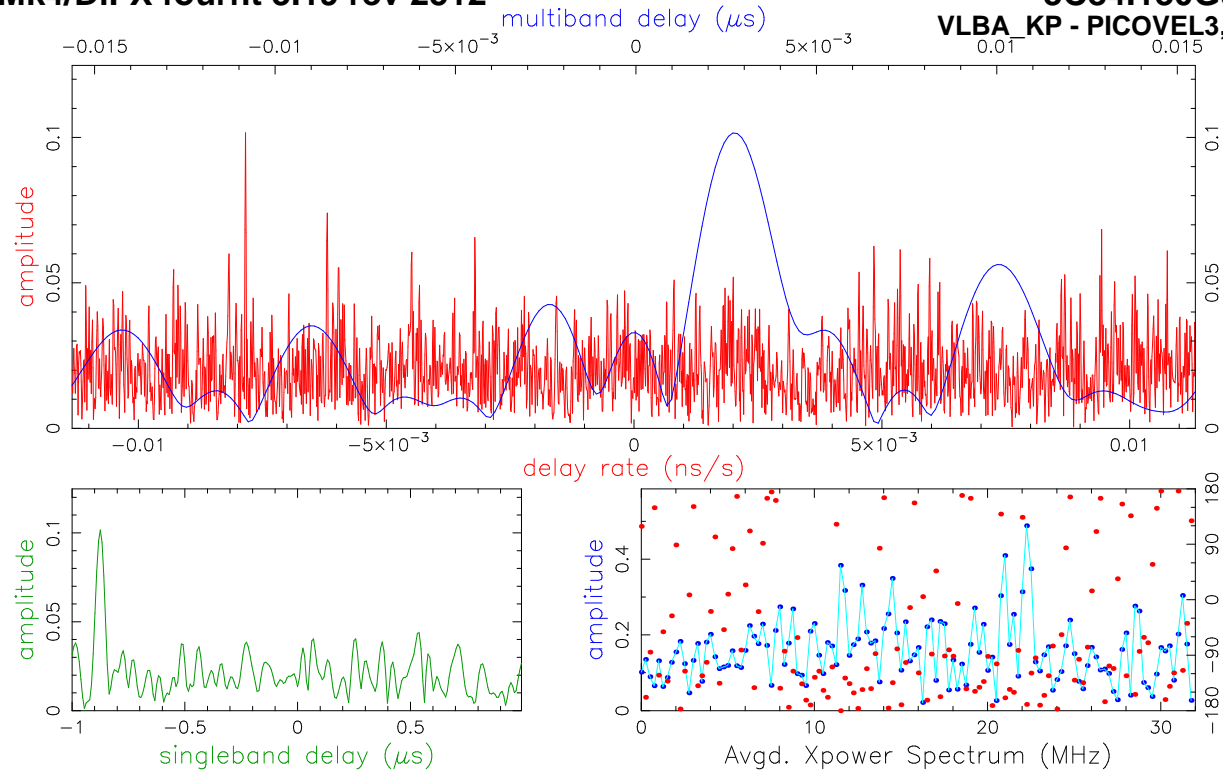
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

k: az 43.8 el 75.8 pa -127.2 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -8776.990 -5800.015 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ki..130G9L Output file: /Exps/c192b/v2/1234/No0205/ki.W.217.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ki
VLBA_KP - PICOVEL3, fgroup W, pol RL

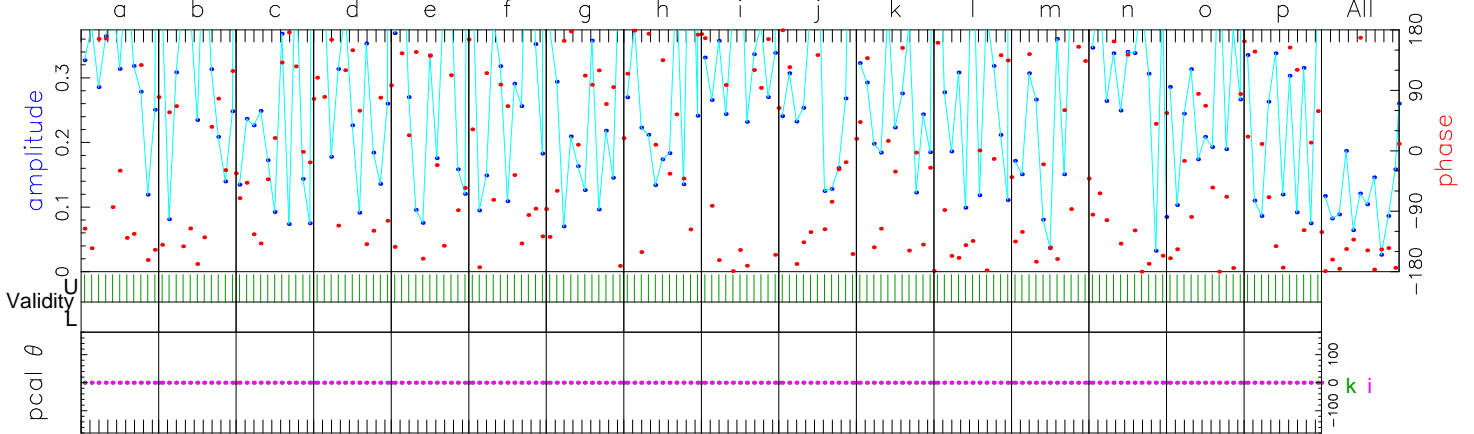


Fringe quality 0

SNR 6.1
Int time 477.908
Amp 0.125
Phase -164.3
PFD 2.8e-01
Delays (us)
SBD -0.875266
MBD 0.002725
Fringe rate (Hz)
-0.675964
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112400
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

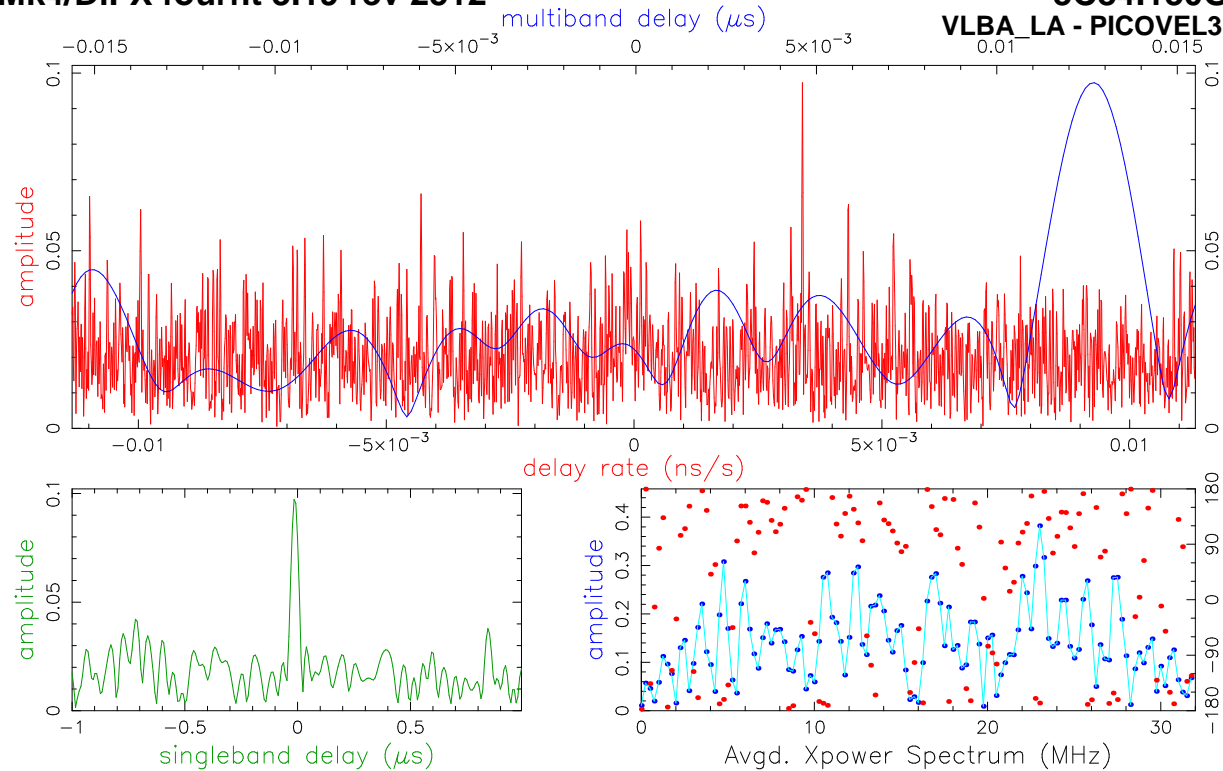


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|--------|
| | -139.5 | -151.3 | -167.0 | 142.6 | 167.1 | -77.8 | 155.4 | -175.7 | 174.9 | -158.2 | -123.8 | -158.9 | -173.0 | -144.6 | -162.7 | 166.7 | | Phase | -164.3 |
| | 0.3 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.0 | 0.2 | 0.2 | 0.3 | 0.1 | 0.0 | | Ampl. | 0.1 |
| | 17.4 | 182.4 | 1.4 | 165.8 | 51.9 | 210.7 | 120.2 | 100.9 | 16.7 | 102.5 | 134.9 | 31.1 | 234.7 | 1.5 | 212.8 | 121.3 | | Sbd box | 17.0 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC phase | |
| ki | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks | |

Group delay (usec)(sbd) 1.35283721133E+04 Apriori delay (usec) 1.35292443880E+04 Resid mbdelay (usec) 2.72529E-03 +/- 1.8E-04
 Sband delay (usec) 1.35283691220E+04 Apriori clock (usec) 1.2700951E-01 Resid sbdelay (usec) -8.75266E-01 +/- 2.8E-03
 Phase delay (usec) 1.35292443827E+04 Apriori clockrate (us/s) 1.5842101E-07 Resid phdelay (usec) -5.29706E-06 +/- 6.1E-07
 Delay rate (us/s) 1.12964430219E+00 Apriori rate (us/s) 1.12965214946E+00 Resid rate (us/s) -7.84727E-06 +/- 2.2E-09
 Total phase (deg) 45.8 Apriori accel (us/s/s) -7.74458072466E-05 Resid phase (deg) -164.3 +/- 18.9

RMS Theor. Amplitude 0.125 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 20.3 32.7 Search (2048X64) 0.096 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 43.7 57.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 35.0 37.7 Inc. seg. avg. 0.114 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 66.1 65.9 Inc. frq. avg. 0.118 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 43.8 el 75.8 pa -127.2 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -8776.990 -5800.015 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ki..130G9L Output file: /Exps/c192b/v2/1234/No0205/ki.W.233.130G9L

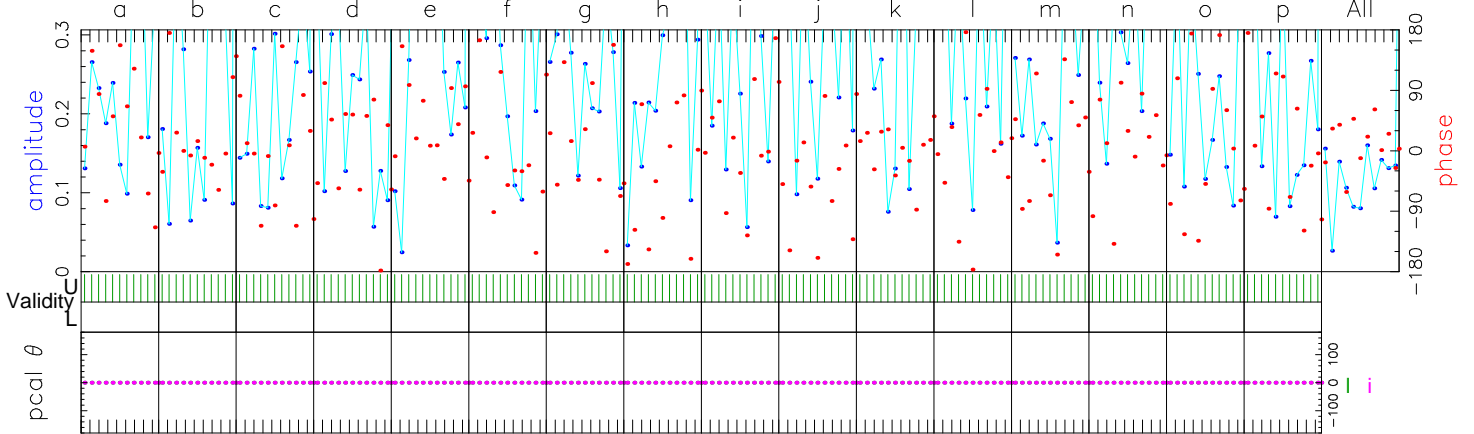


Fringe quality 0

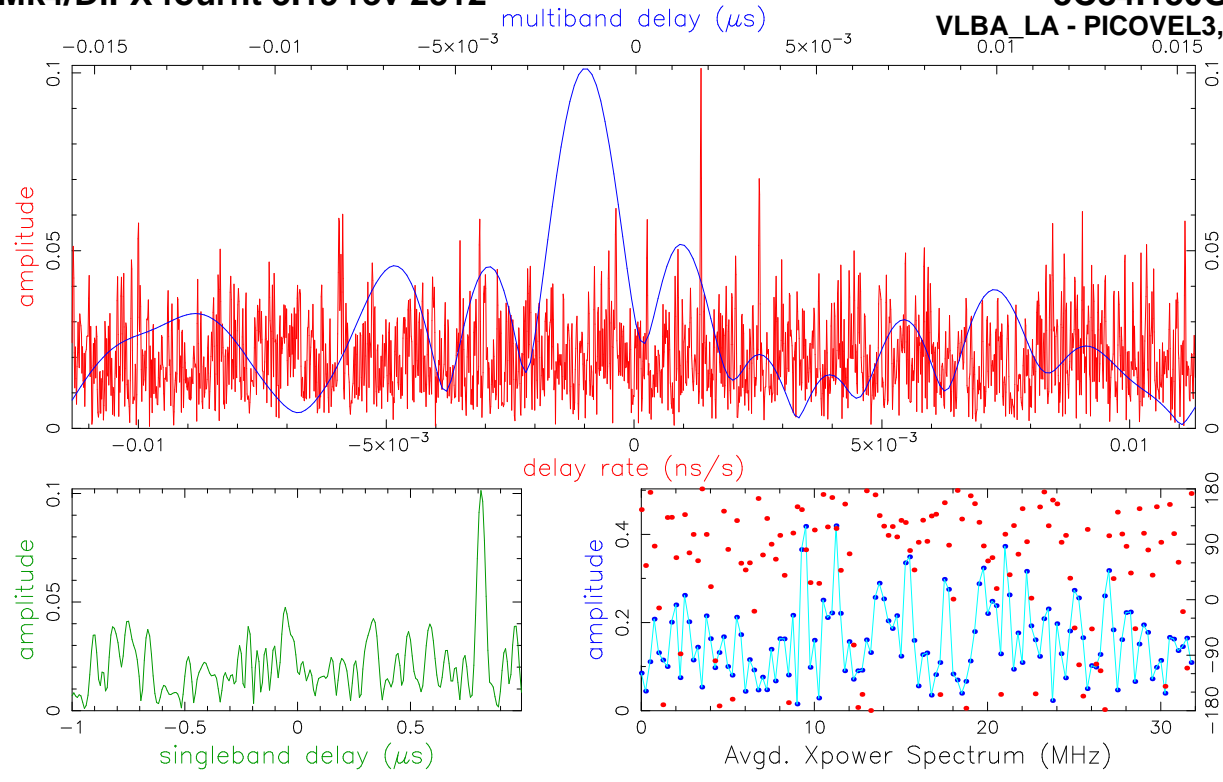
SNR 5.9
Int time 478.875
Amp 0.102
Phase 8.5
PFD 6.2e-01
Delays (us)
SBD -0.012644
MBD 0.012693
Fringe rate (Hz)
0.293477
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Yr:day 16383
2020:080:062909
2020:086:112403
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

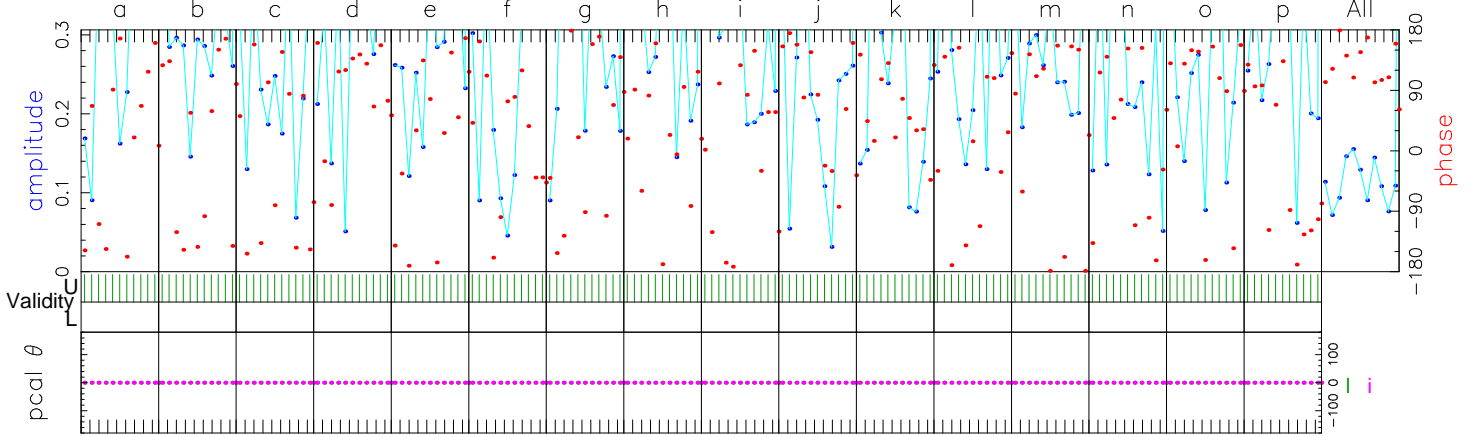


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-------------------------|-------------------|----------|------------------|--------------------------|----------|----------|--|----------|----------|------------------------------|----------|----------|------------------|----------|--------------|----------|------------|----------|--|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| li | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| li | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks | |
| | | | | | | | | | | | | | | | | | | Chan ids | |
| | | | | | | | | | | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.39308242733E+04 | | | Apriori delay (usec) | | | 1.39308428305E+04 | | | Resid mbdelay (usec) | | | 1.26927E-02 | | | +/- | 1.8E-04 | | |
| Sband delay (usec) | 1.39308301865E+04 | | | Apriori clock (usec) | | | -2.3307423E-01 | | | Resid sbdelay (usec) | | | -1.26440E-02 | | | +/- | 2.9E-03 | | |
| Phase delay (usec) | 1.39308428308E+04 | | | Apriori clockrate (us/s) | | | 1.5279932E-09 | | | Resid phdelay (usec) | | | 2.74264E-07 | | | +/- | 6.3E-07 | | |
| Delay rate (us/s) | 1.03353662668E+00 | | | Apriori rate (us/s) | | | 1.03353321971E+00 | | | Resid rate (us/s) | | | 3.40698E-06 | | | +/- | 2.3E-09 | | |
| Total phase (deg) | 160.7 | | | Apriori accel (us/s/s) | | | -7.54419707809E-05 | | | Resid phase (deg) | | | 8.5 | | | +/- | 19.5 | | |
| ph/seg (deg) | RMS | Theor. | Amplitude | 0.102 +/- 0.017 | | | Pcal mode: MANUAL, MANUAL | | | PC period (AP's) 5, 5 | | | | | | | | | |
| amp/seg (%) | 34.9 | 33.7 | Search (2048X64) | 0.094 | | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | sb window (us) | | | -1.000 1.000 | | | | | | |
| ph/frq (deg) | 47.2 | 58.8 | Interp. | 0.000 | | | Bits/sample: 2x2 | | | SampCntNorm: enabled | | | mb window (us) | | -0.016 0.016 | | | | |
| amp/frq (%) | 55.6 | 38.9 | Inc. seg. avg. | 0.103 | | | Sample rate(MISamp/s): 64 | | | dr window (ns/s) | | | -0.011 0.011 | | | | | | |
| | 69.8 | 67.9 | Inc. frq. avg. | 0.100 | | | Data rate(Mb/s): 2048 | | | nlags: 128 t_cohere infinite | | | ion window (TEC) | | 0.00 0.00 | | | | |



Fringe quality 0
SNR 6.1
Int time 478.876
Amp 0.102
Phase 128.4
PFD 2.8e-01
Delays (us)
SBD 0.813899
MBD -0.001387
Fringe rate (Hz) 0.116989
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112408
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

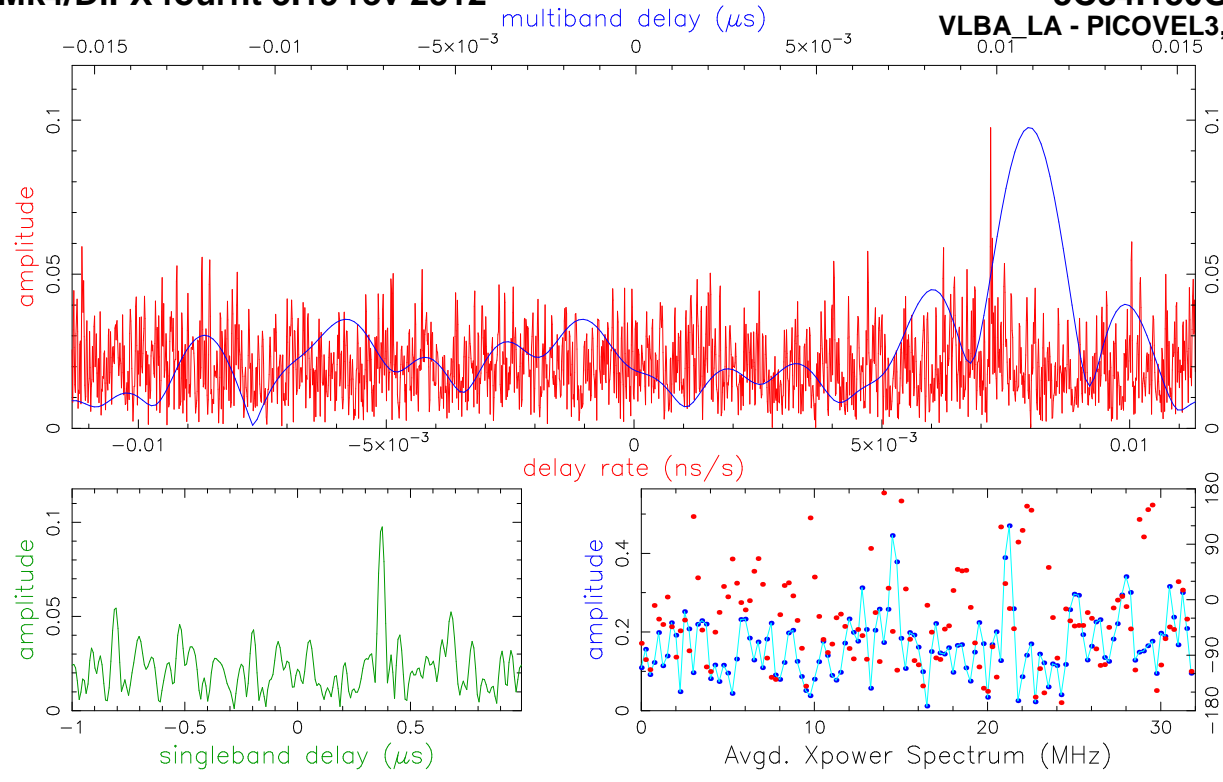


| | | | | | | | | | | | | | | | | | |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
| 133.7 | 171.1 | 147.5 | 117.1 | 109.7 | 51.9 | -169.2 | 69.9 | 131.8 | 121.2 | 51.3 | 134.4 | 151.2 | 124.2 | 136.1 | 166.3 | Phase | 128.4 |
| 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | Ampl. | 0.1 |
| 225.1 | 23.2 | 52.0 | 234.3 | 29.9 | 226.4 | 82.9 | 115.6 | 221.8 | 120.0 | 108.8 | 226.7 | 232.9 | 101.1 | 231.6 | 66.9 | Sbd box | 233.2 |
| U/L 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| l 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | |
| li 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC | |
| li 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC amp | |
| l 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Chan ids | |
| l 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Tracks | |
| l W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Chan ids | |
| i W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | |

Group delay (usec)(sbd) 1.39316539439E+04 Apriori delay (usec) 1.39308428305E+04 Resid mbdelay (usec) -1.38662E-03 +/- 1.8E-04
Sband delay (usec) 1.39316567290E+04 Apriori clock (usec) -2.3307423E-01 Resid sbdelay (usec) 8.13899E-01 +/- 2.8E-03
Phase delay (usec) 1.39308428347E+04 Apriori clockrate (us/s) 1.5279932E-09 Resid phdelay (usec) 4.14066E-06 +/- 6.1E-07
Delay rate (us/s) 1.03353457783E+00 Apriori rate (us/s) 1.03353321971E+00 Resid rate (us/s) 1.35813E-06 +/- 2.2E-09
Total phase (deg) 280.6 Apriori accel (us/s/s) -7.54419707809E-05 Resid phase (deg) 128.4 +/- 18.9

RMS Theor. Amplitude 0.102 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 27.7 32.7 Search (2048X64) 0.095 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 42.5 57.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 41.4 37.7 Inc. seg. avg. 0.099 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 51.6 65.8 Inc. frq. avg. 0.104 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 43.9 el 81.6 pa -134.4 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -8038.585 -5300.940 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/li..130G9L Output file: /Exps/c192b/v2/1234/No0205/li.W.256.130G9L

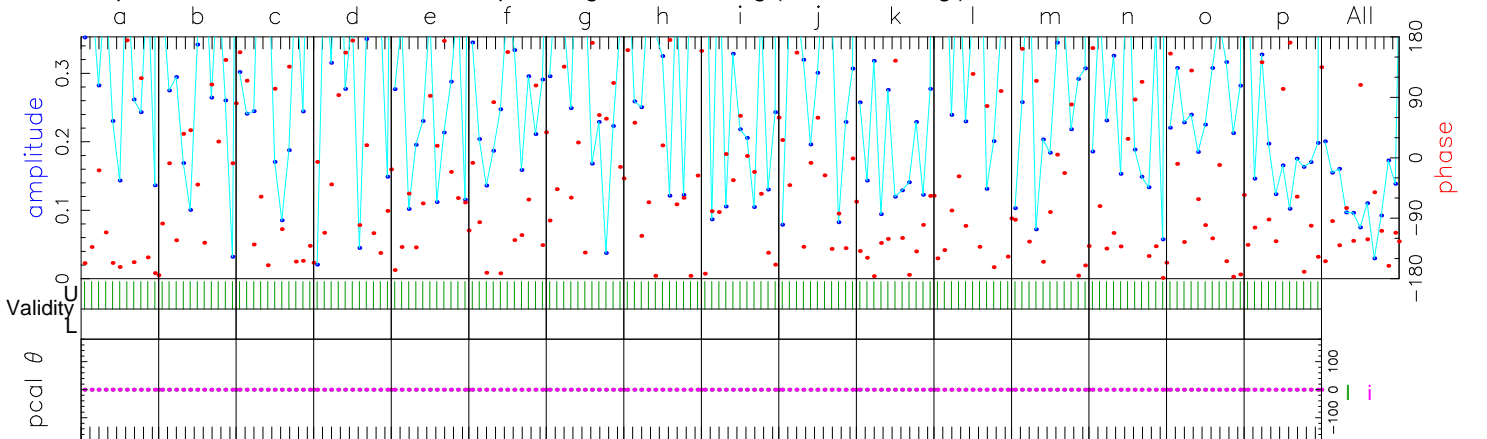


Fringe quality 0

SNR 5.9
Int time 478.876
Amp 0.118
Phase -126.2
PFD 5.3e-01
Delays (us)
SBD 0.372039
MBD 0.010854
Fringe rate (Hz) 0.620881
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

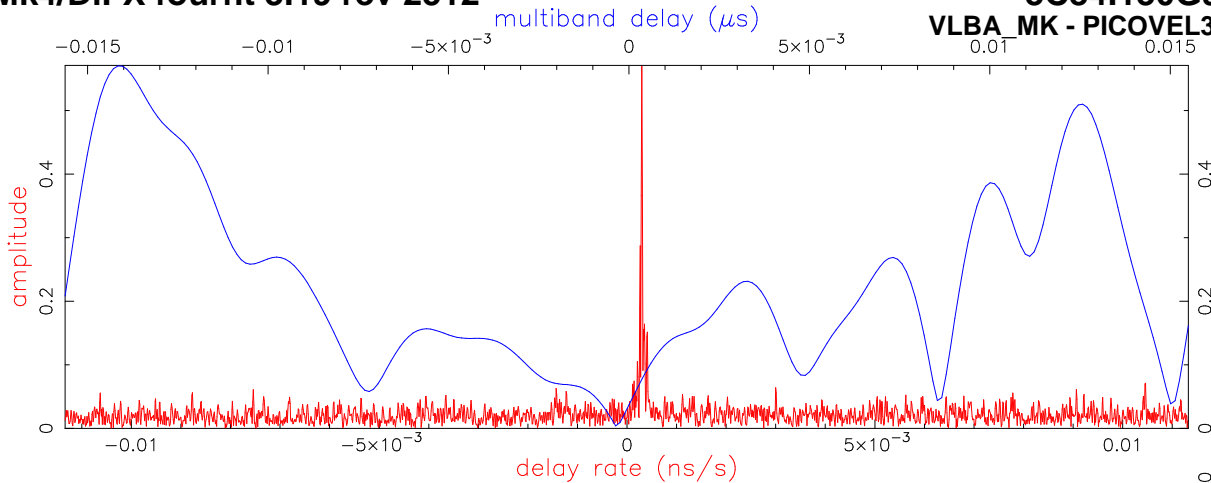
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112418
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



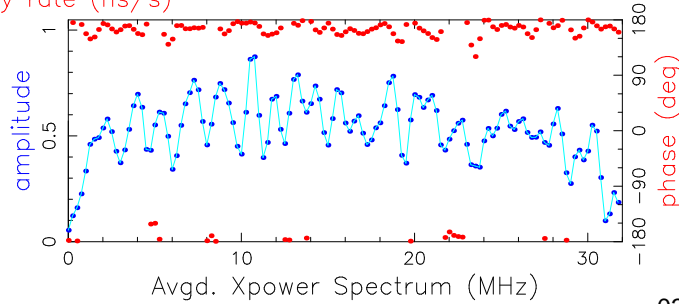
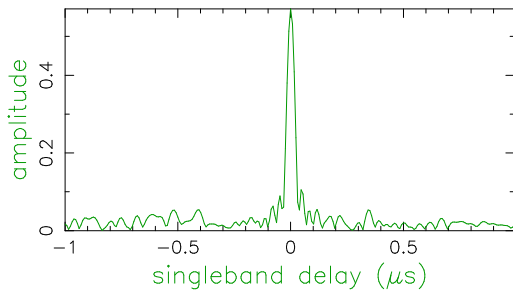
| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------------------------|----------|-------------------|----------|----------|----------|--------------------------|----------|--------------------|----------|----------|----------|----------------------|----------|--------------|----------|----------|------------|---------------|
| | -152.2 | -56.5 | -150.5 | -136.1 | -97.1 | -138.6 | -26.8 | -111.4 | -81.5 | -63.0 | -134.3 | -140.1 | -129.7 | -124.3 | -127.6 | -142.4 | | Phase -126.2 |
| | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | | Ampl. 0.1 |
| | 176.6 | 3.1 | 177.3 | 210.7 | 93.4 | 118.3 | 162.9 | 52.5 | 135.2 | 54.7 | 120.4 | 64.5 | 69.5 | 57.1 | 229.4 | 133.0 | | Sbd box 176.6 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| li | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase |
| li | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | ManI PC |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| l | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| l | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks |
| l | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks |
| Group delay (usec)(sbd) | | 1.39312286847E+04 | | | | Apriori delay (usec) | | 1.39308428305E+04 | | | | Resid mbdelay (usec) | | 1.08542E-02 | | | | +/- 1.8E-04 |
| Sband delay (usec) | | 1.39312148690E+04 | | | | Apriori clock (usec) | | -2.3307423E-01 | | | | Resid sbdelay (usec) | | 3.72039E-01 | | | | +/- 2.9E-03 |
| Phase delay (usec) | | 1.39308428265E+04 | | | | Apriori clockrate (us/s) | | 1.5279932E-09 | | | | Resid phdelay (usec) | | -4.06952E-06 | | | | +/- 6.2E-07 |
| Delay rate (us/s) | | 1.03354042752E+00 | | | | Apriori rate (us/s) | | 1.03353321971E+00 | | | | Resid rate (us/s) | | 7.20781E-06 | | | | +/- 2.2E-09 |
| Total phase (deg) | | | | | 26.0 | Apriori accel (us/s/s) | | -7.54419707809E-05 | | | | Resid phase (deg) | | -126.2 | | | | +/- 19.3 |

ph/seg (deg) 50.0 33.5 Search (2048X64) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.7 58.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.3 38.6 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.7 67.4 Inc. frq. avg. 0.110 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 43.9 el 81.6 pa -134.4 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -8038.585 -5300.940 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/li..130G9L Output file: /Exps/c192b/v2/1234/No0205/li.W.289.130G9L



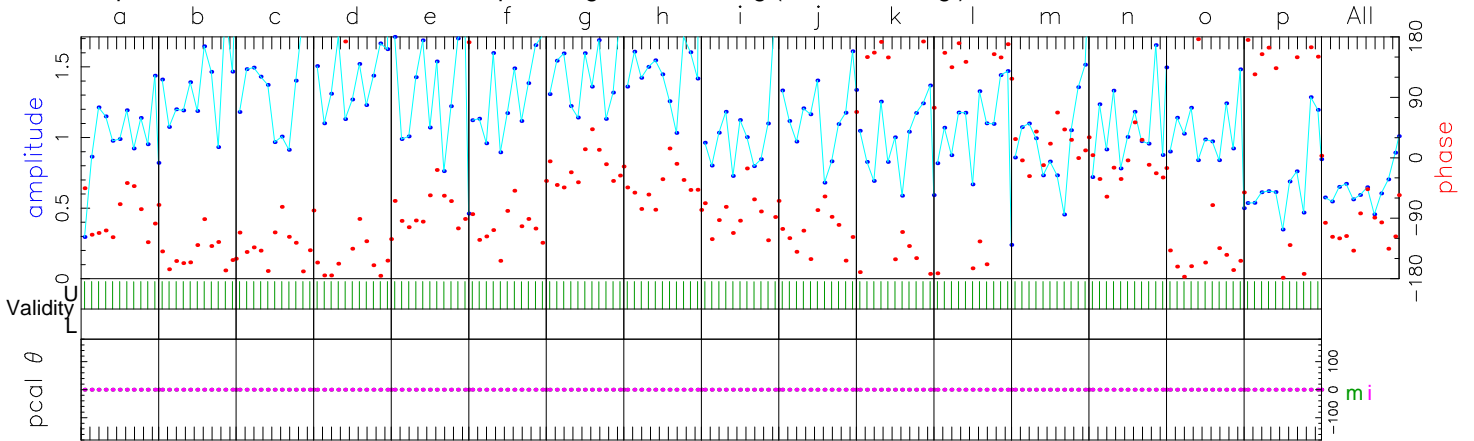
Fringe quality 6

SNR 34.2
Int time 478.637
Amp 0.571
Phase -106.5
PFD 0.0e+00
Delays (us)
SBD 0.000763
MBD -0.014098
Fringe rate (Hz)
0.025628
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112405
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

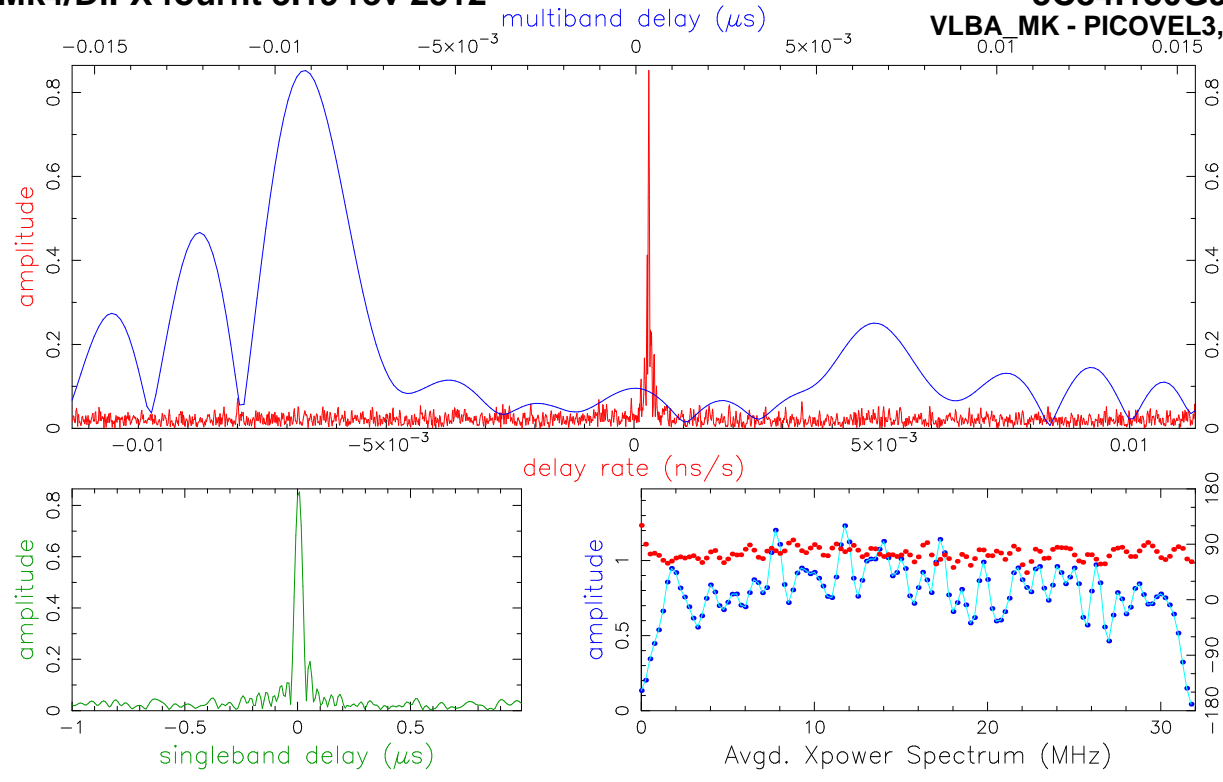
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-------------------------|-------------------|----------|----------|--------------------------|----------|----------|--------------------|----------|----------|----------------------|----------|----------|--------------|----------|----------|-------------|------------|----------|--------|
| UL | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| m:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| m:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| m | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks | |
| | | | | | | | | | | | | | | | | | | | Tracks |
| Group delay (usec)(sbd) | 6.02374215372E+03 | | | Apriori delay (usec) | | | 6.02375625208E+03 | | | Resid mbdelay (usec) | | | -1.40984E-02 | | | +/- 3.2E-05 | | | |
| Sband delay (usec) | 6.02375701508E+03 | | | Apriori clock (usec) | | | 3.1187384E+00 | | | Resid sbdelay (usec) | | | 7.63000E-04 | | | +/- 5.0E-04 | | | |
| Phase delay (usec) | 6.02375624865E+03 | | | Apriori clockrate (us/s) | | | 3.4430770E-07 | | | Resid phdelay (usec) | | | -3.43556E-06 | | | +/- 1.1E-07 | | | |
| Delay rate (us/s) | 1.82824334905E+00 | | | Apriori rate (us/s) | | | 1.82824305154E+00 | | | Resid rate (us/s) | | | 2.97513E-07 | | | +/- 3.9E-10 | | | |
| Total phase (deg) | 93.1 | | | Apriori accel (us/s/s) | | | -5.17519551268E-05 | | | Resid phase (deg) | | | -106.5 | | | +/- 3.4 | | | |

ph/seg (deg) 25.3 5.8 Search (2048X64) 0.562 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 21.4 10.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.3 6.7 Inc. seg. avg. 0.626 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 91.6 11.7 Inc. frq. avg. 1.048 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 52.2 el 37.5 pa -95.9 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -14078.469 -5218.174 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mi.130G9L Output file: /Exps/c192b/v2/1234/No0205/mi.W.247.130G9L

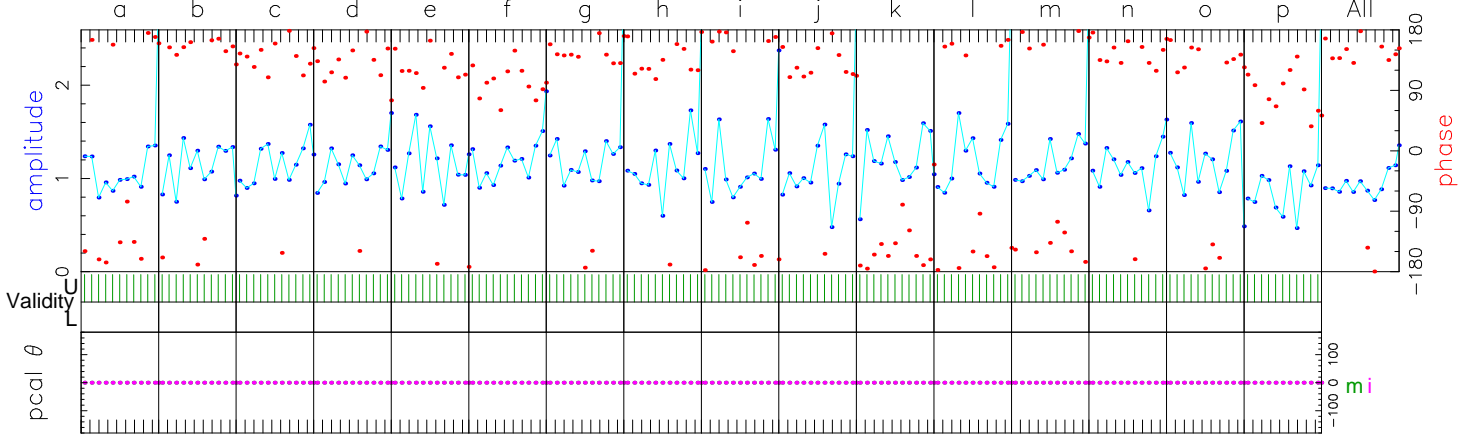


Fringe quality 5

SNR 51.7
Int time 478.637
Amp 0.865
Phase 155.7
PFD 0.0e+00
Delays (us)
SBD 0.004731
MBD -0.009209
Fringe rate (Hz) 0.025733
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

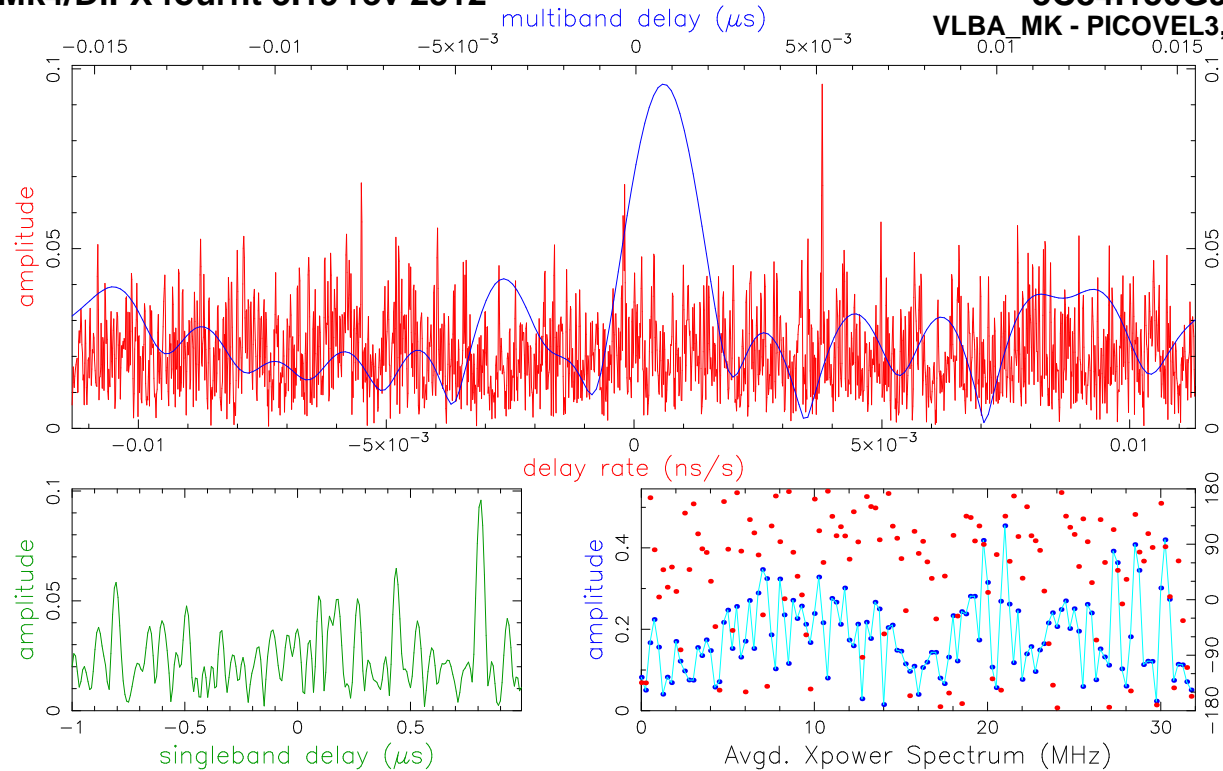
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112411
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



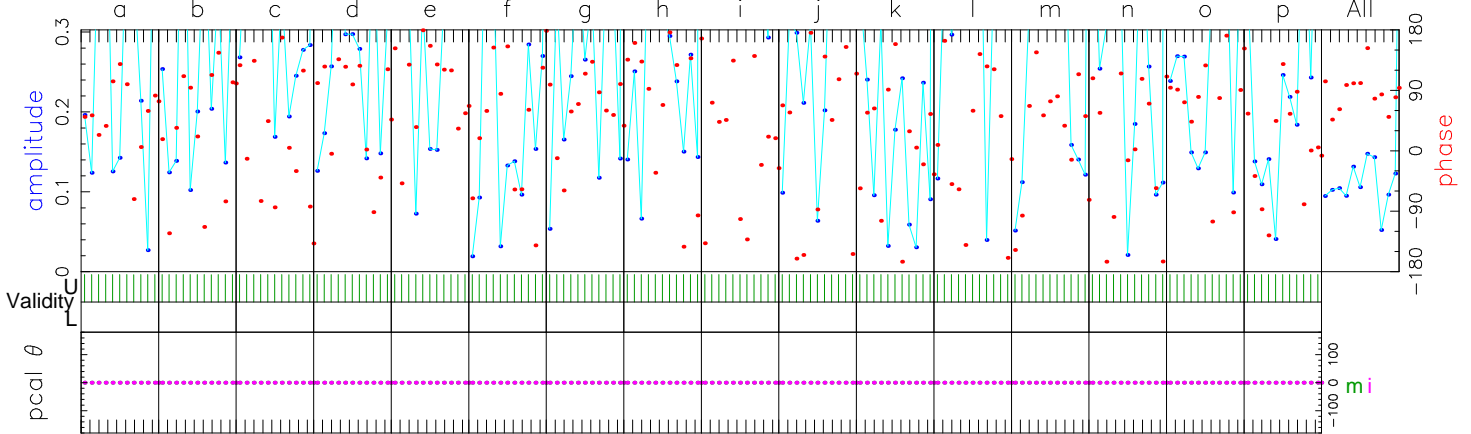
| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-------------------------|-------------------|----------|----------|--------------------------|----------|----------|--------------------|----------|----------|----------------------|----------|----------|--------------|----------|----------|-------------|------------|----------|--------|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| m:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| m:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| m | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks | |
| | | | | | | | | | | | | | | | | | | | Tracks |
| Group delay (usec)(sbd) | 6.02374704269E+03 | | | Apriori delay (usec) | | | 6.02375625208E+03 | | | Resid mbdelay (usec) | | | -9.20940E-03 | | | +/- 2.1E-05 | | | |
| Sband delay (usec) | 6.02376098308E+03 | | | Apriori clock (usec) | | | 3.1187384E+00 | | | Resid sbdelay (usec) | | | 4.73100E-03 | | | +/- 3.3E-04 | | | |
| Phase delay (usec) | 6.02375625710E+03 | | | Apriori clockrate (us/s) | | | 3.4430770E-07 | | | Resid phdelay (usec) | | | 5.01963E-06 | | | +/- 7.1E-08 | | | |
| Delay rate (us/s) | 1.82824335028E+00 | | | Apriori rate (us/s) | | | 1.82824305154E+00 | | | Resid rate (us/s) | | | 2.98736E-07 | | | +/- 2.6E-10 | | | |
| Total phase (deg) | 355.3 | | | Apriori accel (us/s/s) | | | -5.17519551268E-05 | | | Resid phase (deg) | | | 155.7 | | | +/- 2.2 | | | |

ph/seg (deg) 24.7 3.8 Theor. Amplitude 0.865 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 14.8 6.7 Interp. 0.842 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.8 4.4 Inc. seg. avg. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.8 7.7 Inc. frq. avg. 1.001 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 52.2 el 37.5 pa -95.9 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -14078.469 -5218.174 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mi.130G9L Output file: /Exps/c192b/v2/1234/No0205/mi.W.266.130G9L



Fringe quality 0
SNR 5.8
Int time 478.637
Amp 0.101
Phase 88.4
PFD 8.7e-01
Delays (us)
SBD 0.810241
MBD 0.000750
Fringe rate (Hz) 0.327137
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112418
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

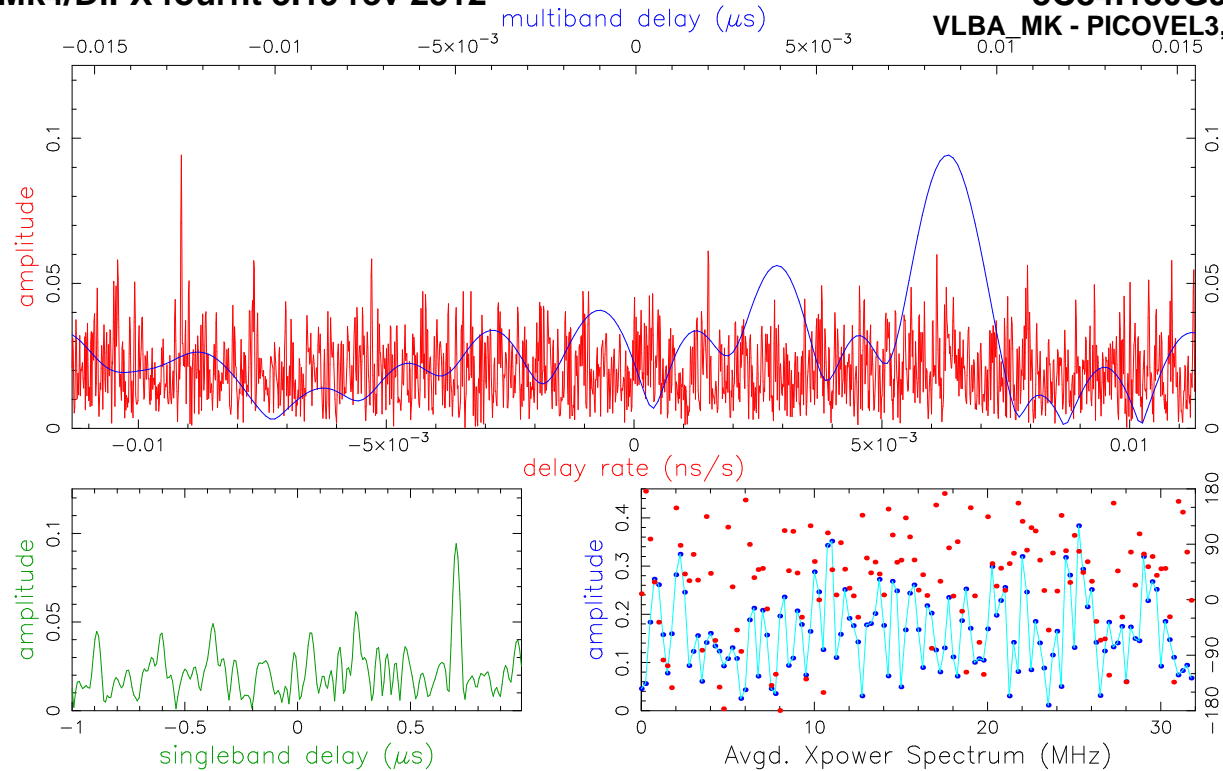
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| m:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| m:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| m | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Chan ids |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks |

Group delay (usec)(sbd) 6.02456950190E+03 Apriori delay (usec) 6.02375625208E+03 Resid mbdelay (usec) 7.49816E-04 +/- 1.9E-04
Sband delay (usec) 6.02456649258E+03 Apriori clock (usec) 3.1187384E+00 Resid sbdelay (usec) 8.10241E-01 +/- 3.0E-03
Phase delay (usec) 6.02375625494E+03 Apriori clockrate (us/s) 3.4430770E-07 Resid phdelay (usec) 2.85139E-06 +/- 6.4E-07
Delay rate (us/s) 1.82824684927E+00 Apriori rate (us/s) 1.82824305154E+00 Resid rate (us/s) 3.79773E-06 +/- 2.3E-09
Total phase (deg) 288.1 Apriori accel (us/s/s) -5.17519551268E-05 Resid phase (deg) 88.4 +/- 19.9

ph/seg (deg) 28.4 34.4 Search (2048X64) 0.094 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 37.1 60.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 55.4 39.8 Inc. seg. avg. 0.098 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 55.4 69.4 Inc. frq. avg. 0.105 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 52.2 el 37.5 pa -95.9 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -14078.469 -5218.174 simultaneous interpolator
ion window (TEC) 0.00 0.00

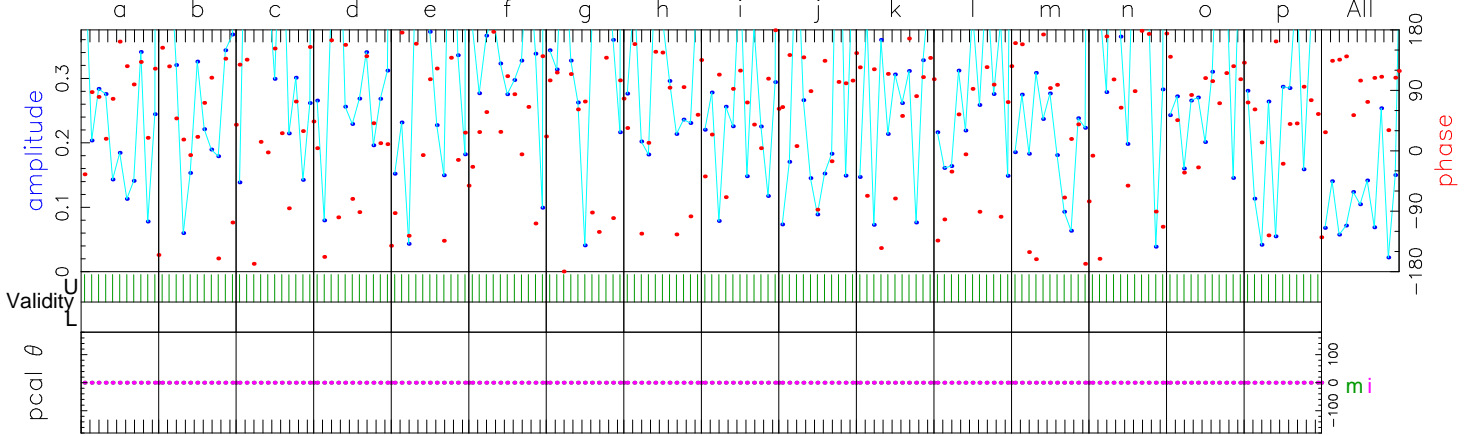


Fringe quality 0

SNR 5.6
Int time 478.637
Amp 0.125
Phase 100.4
PFD 9.9e-01
Delays (us)
SBD 0.703252
MBD 0.008639
Fringe rate (Hz)
-0.787755
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112422
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

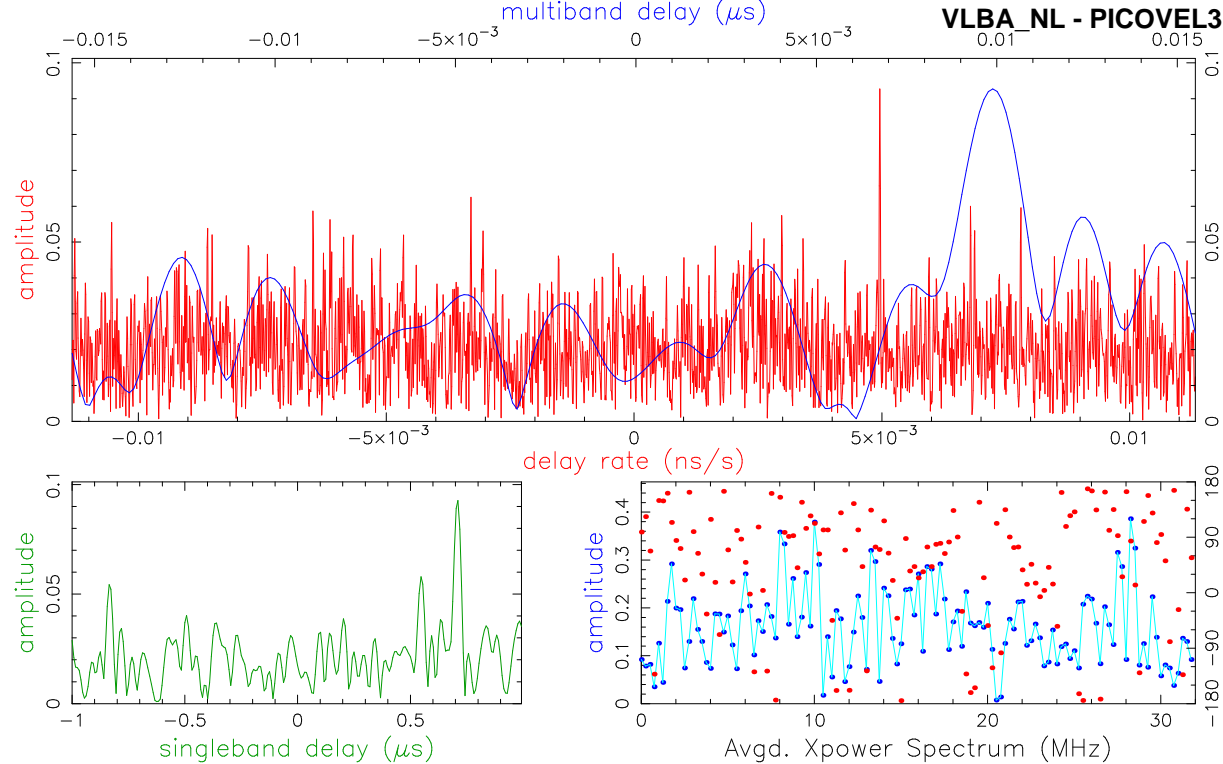


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | |
|-------------------------|-------------------|----------|----------|--------------------------|----------|----------|--------------------|----------|----------|----------------------|----------|----------|--------------|----------|----------|-------------|------------|-------|----------|----------|
| UL | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase |
| m:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| m | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | | Chan ids | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | | Tracks | |
| | | | | | | | | | | | | | | | | | | | | Tracks |
| Group delay (usec)(sbd) | 6.02445239114E+03 | | | Apriori delay (usec) | | | 6.02375625208E+03 | | | Resid mbdelay (usec) | | | 8.63905E-03 | | | +/- 1.9E-04 | | | | |
| Sband delay (usec) | 6.02445950458E+03 | | | Apriori clock (usec) | | | 3.1187384E+00 | | | Resid sbdelay (usec) | | | 7.03252E-01 | | | +/- 3.1E-03 | | | | |
| Phase delay (usec) | 6.02375625532E+03 | | | Apriori clockrate (us/s) | | | 3.4430770E-07 | | | Resid phdelay (usec) | | | 3.23677E-06 | | | +/- 6.6E-07 | | | | |
| Delay rate (us/s) | 1.82823390648E+00 | | | Apriori rate (us/s) | | | 1.82824305154E+00 | | | Resid rate (us/s) | | | -9.14506E-06 | | | +/- 2.4E-09 | | | | |
| Total phase (deg) | 300.0 | | | Apriori accel (us/s/s) | | | -5.17519551268E-05 | | | Resid phase (deg) | | | 100.4 | | | +/- 20.3 | | | | |

ph/seg (deg) 39.7 35.2 Search (2048X64) 0.092 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.4 61.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.0 40.7 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.7 70.9 Inc. frq. avg. 0.128 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 52.2 el 37.5 pa -95.9 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -14078.469 -5218.174 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mi..130G9L Output file: /Exps/c192b/v2/1234/No0205/mi.W.305.130G9L

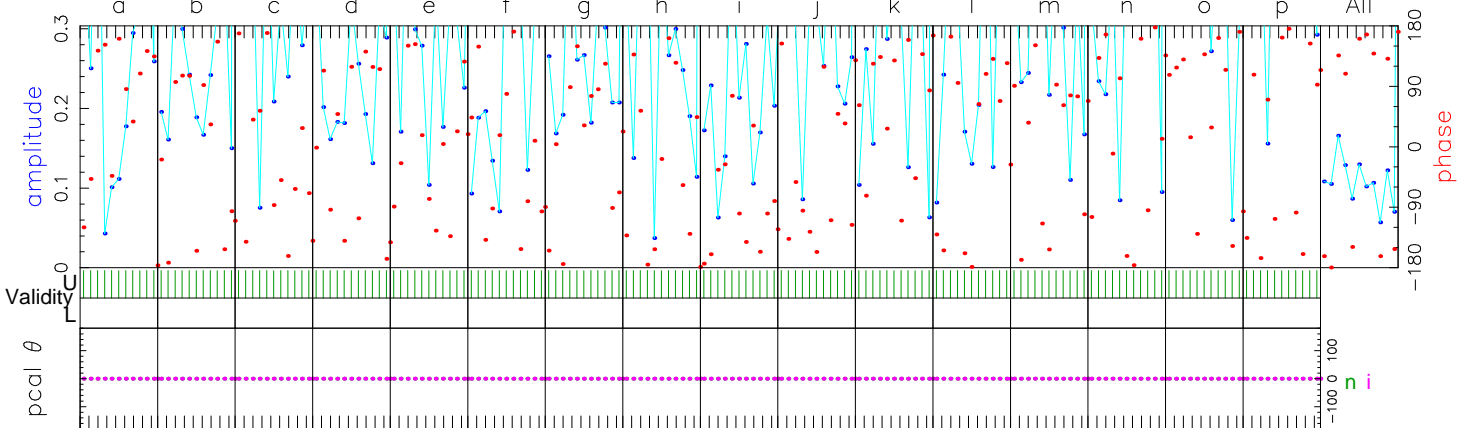
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ni
VLBA_NL - PICOVEL3, fgroup W, pol LL



Fringe quality 0
SNR 5.6
Int time 478.257
Amp 0.101
Phase 160.5
PFD 1.0e+00
Delays (us)
SBD 0.708715
MBD 0.009890
Fringe rate (Hz) 0.428320
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112416
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



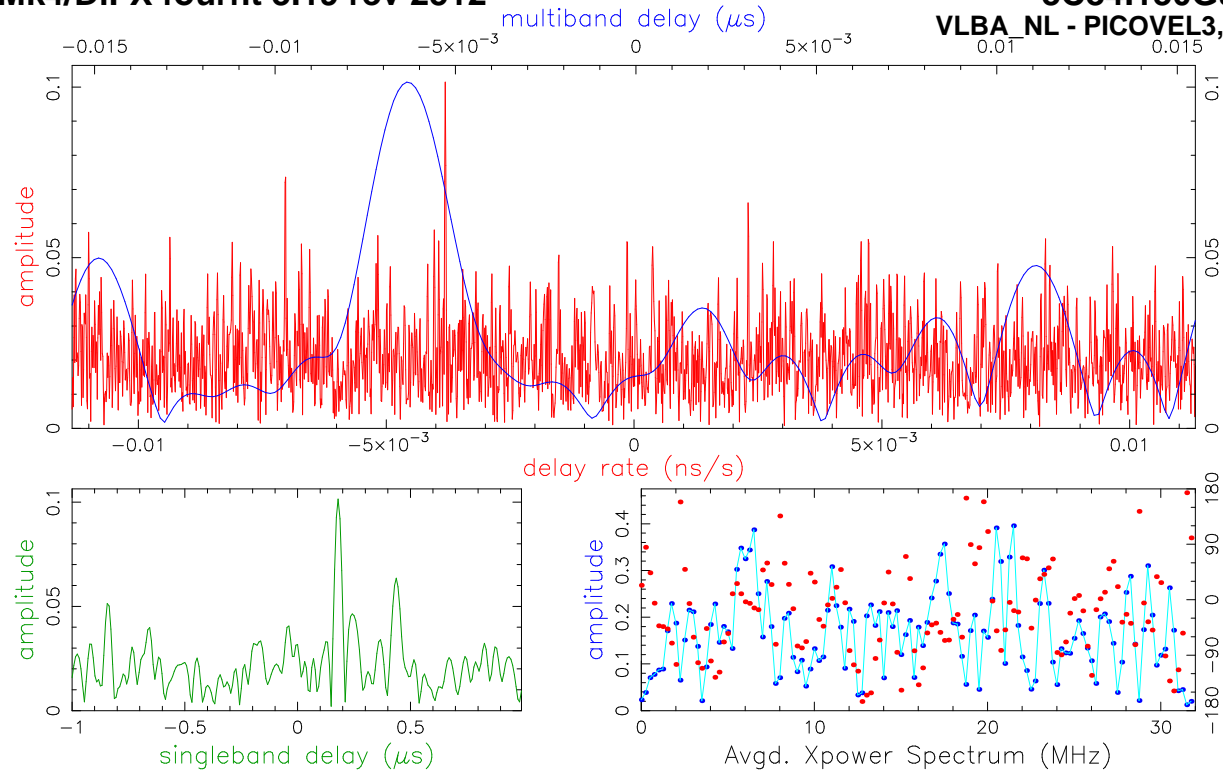
| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| | 139.8 | 136.9 | -112.5 | 138.6 | -143.9 | -154.2 | 104.0 | 173.8 | -123.2 | -141.9 | 137.3 | 124.2 | 120.0 | -169.2 | 130.2 | -174.2 | Phase | 160.5 |
| | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | Ampl. | 0.1 |
| | 215.8 | 56.6 | 130.6 | 212.9 | 7.6 | 230.7 | 49.7 | 21.8 | 78.6 | 226.0 | 107.2 | 4.5 | 167.3 | 241.4 | 219.7 | 220.5 | Sbd box | 219.7 |
| UL | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | |
| ni | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Tracks | |

Group delay (usec)(sbd) 1.40391469783E+04 Apriori delay (usec) 1.40384495879E+04 Resid mbdelay (usec) 9.89032E-03 +/- 1.9E-04
Sband delay (usec) 1.40391583034E+04 Apriori clock (usec) 2.7049849E+01 Resid sbdelay (usec) 7.08715E-01 +/- 3.1E-03
Phase delay (usec) 1.40384495931E+04 Apriori clockrate (us/s) 4.8722349E-07 Resid phdelay (usec) 5.17512E-06 +/- 6.6E-07
Delay rate (us/s) 8.03220991887E-01 Apriori rate (us/s) 8.03216019513E-01 Resid rate (us/s) 4.97237E-06 +/- 2.4E-09
Total phase (deg) 342.3 Apriori accel (us/s/s) -6.97747228440E-05 Resid phase (deg) 160.5 +/- 20.5

ph/seg (deg) 33.7 35.5 Amplitude 0.101 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 48.6 62.0 Search (2048X64) 0.091 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 48.3 41.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 78.3 71.6 Inc. seg. avg. 0.099 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
n: az 270.2 el 84.8 pa 84.7 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6267.092 -4383.606 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ni..130G9L Output file: /Exps/c192b/v2/1234/No0205/ni.W.282.130G9L simultaneous interpolator

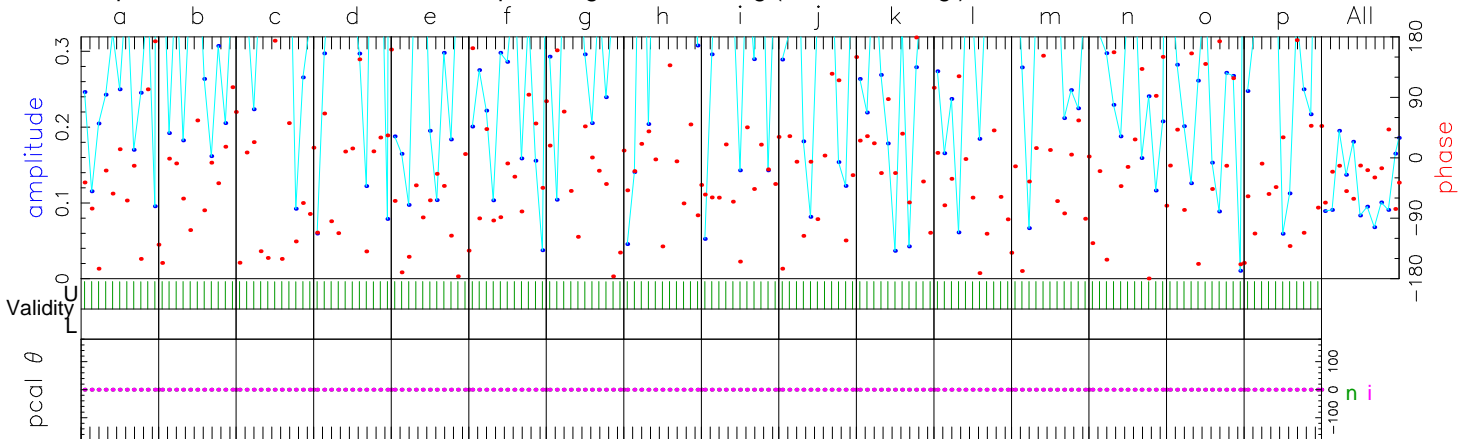
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ni
VLBA_NL - PICOVEL3, fgroup W, pol RR



Fringe quality 0
SNR 6.1
Int time 478.256
Amp 0.106
Phase -34.0
PFD 2.9e-01
Delays (us)
SBD 0.179526
MBD -0.006323
Fringe rate (Hz)
-0.328739
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112421
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|---------------|
| | -51.1 | -21.6 | -132.4 | 4.0 | -76.0 | -28.5 | -31.4 | -11.2 | -23.5 | -13.5 | 3.7 | -53.3 | -22.6 | -112.1 | 50.6 | -62.3 | | Phase -34.0 |
| | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 | | Ampl. 0.1 |
| | 11.0 | 112.4 | 141.5 | 62.3 | 183.2 | 69.2 | 105.9 | 88.4 | 152.2 | 196.8 | 86.7 | 69.6 | 58.3 | 6.6 | 5.7 | 51.4 | | Sbd box 152.0 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| ni | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase |
| ni | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks |

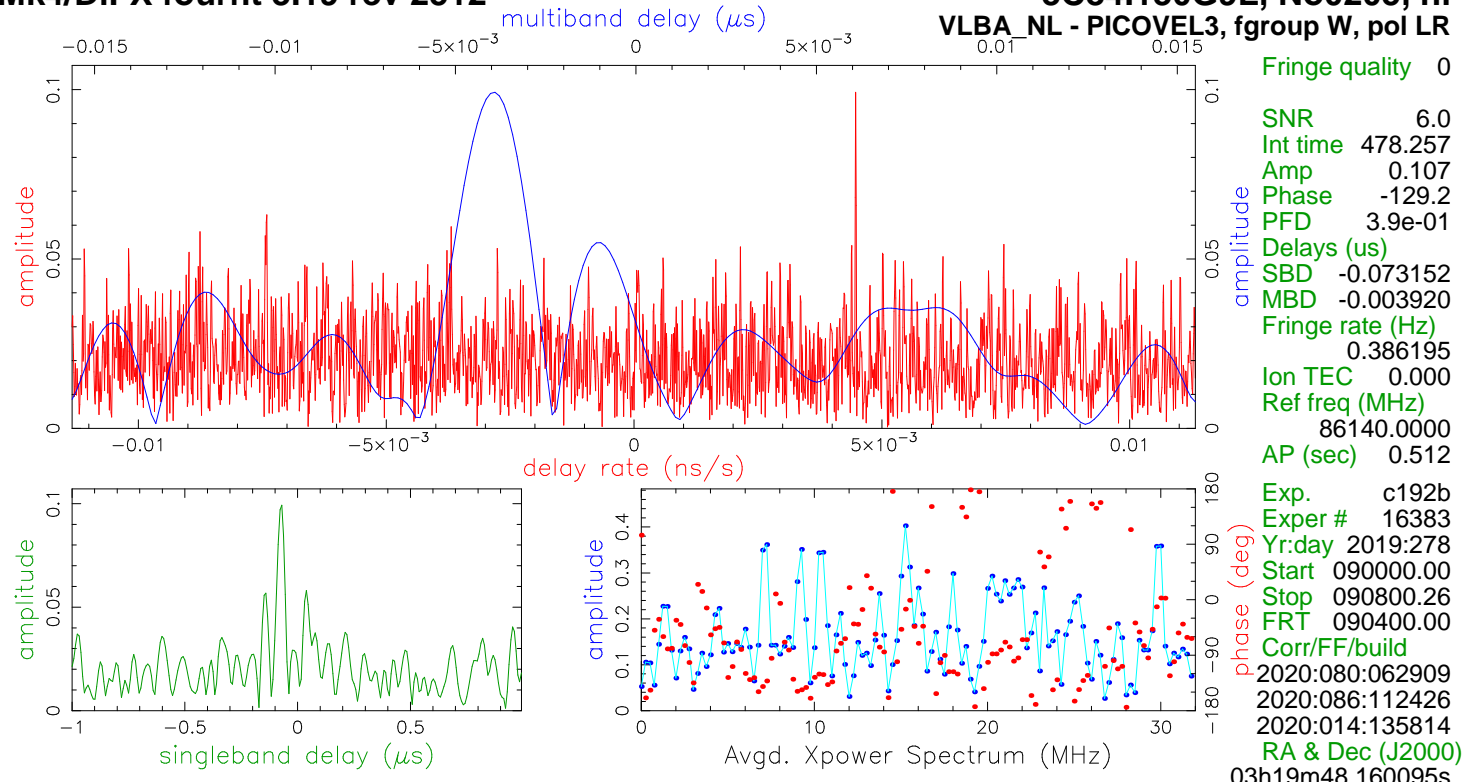
Group delay (usec)(sbd) 1.40386307645E+04 Apriori delay (usec) 1.40384495879E+04 Resid mbdelay (usec) -6.32344E-03 +/- 1.8E-04
 Sband delay (usec) 1.40386291139E+04 Apriori clock (usec) 2.7049849E+01 Resid sbdelay (usec) 1.79526E-01 +/- 2.8E-03
 Phase delay (usec) 1.40384495868E+04 Apriori clockrate (us/s) 4.8722349E-07 Resid phdelay (usec) -1.09662E-06 +/- 6.1E-07
 Delay rate (us/s) 8.03212203176E-01 Apriori rate (us/s) 8.03216019513E-01 Resid rate (us/s) -3.81634E-06 +/- 2.2E-09
 Total phase (deg) 147.8 Apriori accel (us/s/s) -6.97747228440E-05 Resid phase (deg) -34.0 +/- 18.9

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 270.2 el 84.8 pa 84.7 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6267.092 -4383.606 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ni..130G9L Output file: /Exps/c192b/v2/1234/No0205/ni.W.301.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ni
VLBA_NL - PICOVEL3, fgroup W, pol LR



Fringe quality 0

SNR 6.0

Int time 478.257

Amp 0.107

Phase -129.2

PFD 3.9e-01

Delays (us)

SBD -0.073152

MBD -0.003920

Fringe rate (Hz)

0.386195

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192b

Exper # 16383

Yr:day 2019:278

Start 090000.00

Stop 090800.26

FRT 090400.00

Corr/FF/build

2020:080:062909

2020:086:112426

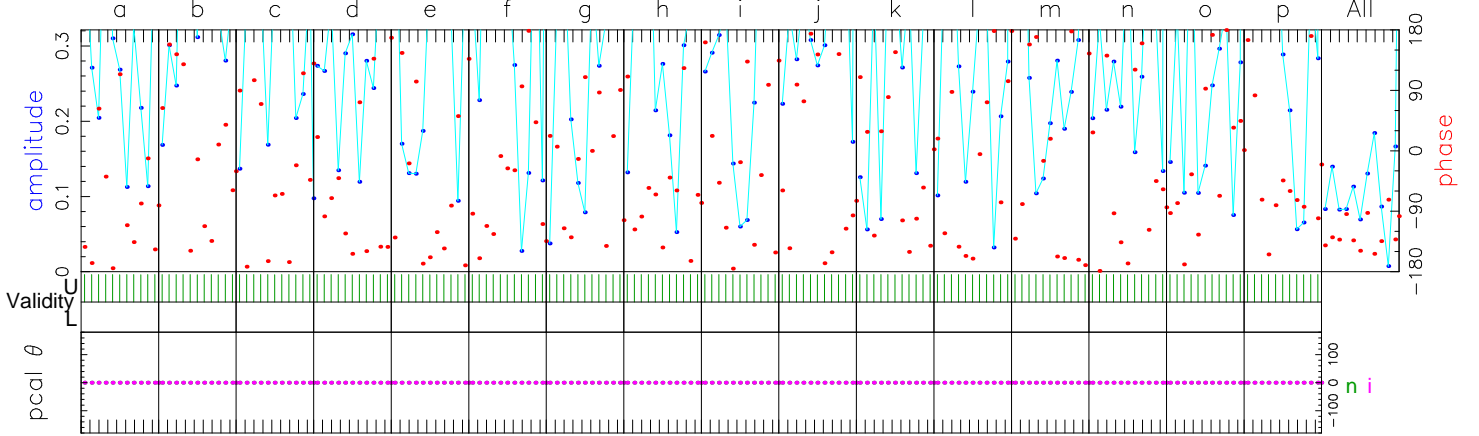
2020:014:135814

RA & Dec (J2000)

03h19m48.160095s

+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------------------------|----------|-------------------|----------|----------|----------|--------------------------|----------|--------------------|----------|----------|----------|----------------------|----------|--------------|----------|----------|------------|---------|
| | -130.6 | -142.0 | -148.2 | -129.3 | -144.0 | -72.3 | 3.6 | -97.2 | -120.4 | -175.2 | -146.9 | 136.6 | -142.5 | -140.2 | -78.0 | -114.5 | Phase | -129.2 |
| | 0.2 | 0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | Ampl. | 0.1 |
| | 48.8 | 154.4 | 69.2 | 111.3 | 132.1 | 80.1 | 183.6 | 25.7 | 157.0 | 12.8 | 247.7 | 87.5 | 64.4 | 204.6 | 171.7 | 80.0 | Sbd box | 119.6 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | |
| ni | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| ni | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Chan ids | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | Tracks | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | |
| Group delay (usec)(sbd) | | 1.40383831684E+04 | | | | Apriori delay (usec) | | 1.40384495879E+04 | | | | Resid mbdelay (usec) | | -3.91953E-03 | | | +/- | 1.8E-04 |
| Sband delay (usec) | | 1.40383764354E+04 | | | | Apriori clock (usec) | | 2.7049849E+01 | | | | Resid sbdelay (usec) | | -7.31525E-02 | | | +/- | 2.9E-03 |
| Phase delay (usec) | | 1.40384495838E+04 | | | | Apriori clockrate (us/s) | | 4.8722349E-07 | | | | Resid phdelay (usec) | | -4.16650E-06 | | | +/- | 6.2E-07 |
| Delay rate (us/s) | | 8.03220502849E-01 | | | | Apriori rate (us/s) | | 8.03216019513E-01 | | | | Resid rate (us/s) | | 4.48334E-06 | | | +/- | 2.2E-09 |
| Total phase (deg) | | | | 52.6 | | Apriori accel (us/s/s) | | -6.97747228440E-05 | | | | Resid phase (deg) | | -129.2 | | | +/- | 19.1 |

ph/seg (deg) 25.1 33.1 Amplitude 0.107 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

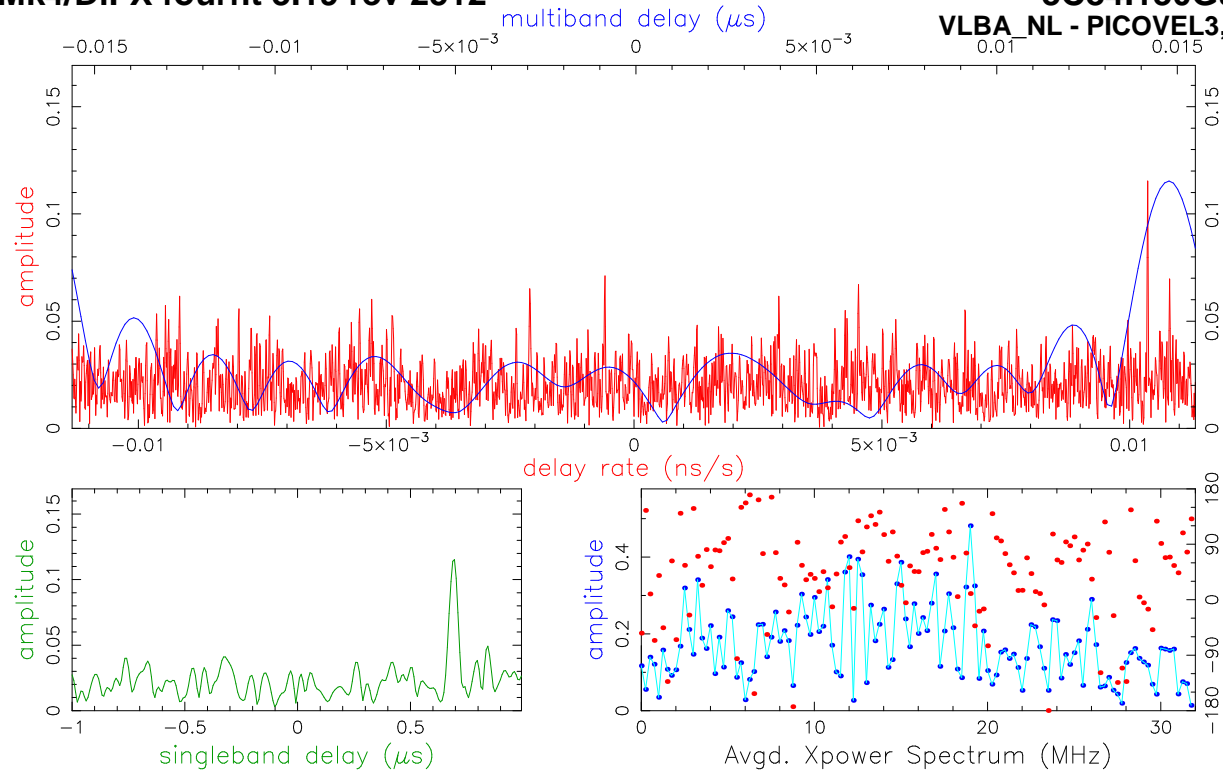
amp/seg (%) 53.6 57.7 Search (2048X64) 0.097 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 51.5 38.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 56.6 66.6 Inc. seg. avg. 0.097 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

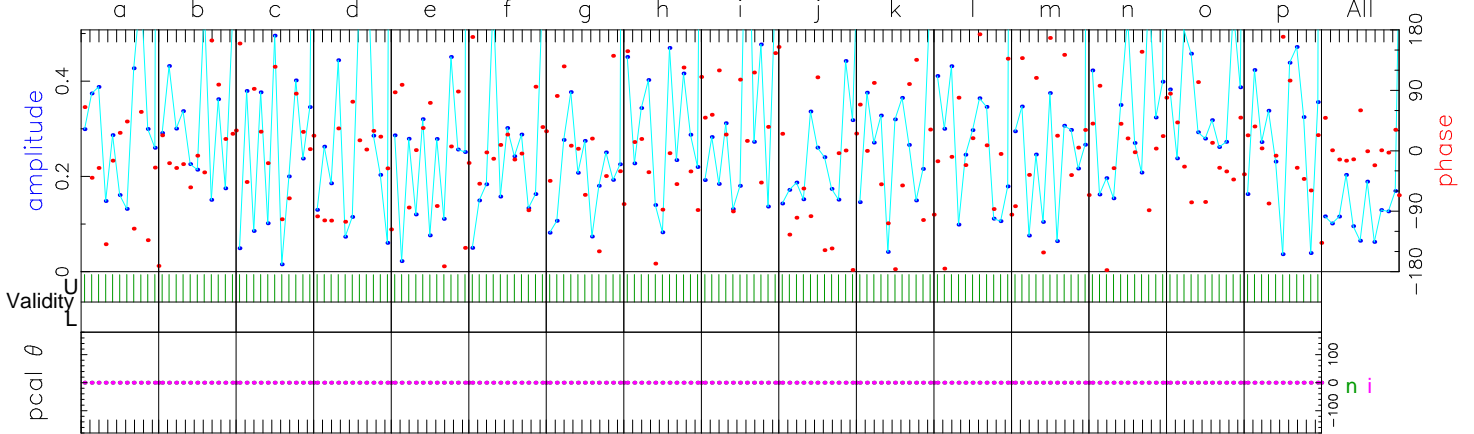
n: az 270.2 el 84.8 pa 84.7 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6267.092 -4383.606 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ni..130G9L Output file: /Exps/c192b/v2/1234/No0205/ni.W.311.130G9L simultaneous interpolator



Fringe quality 0
SNR 7.0
Int time 478.256
Amp 0.169
Phase 3.9
PFD 9.0e-04
Delays (us)
SBD 0.692113
MBD 0.014761
Fringe rate (Hz) 0.894087
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112433
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

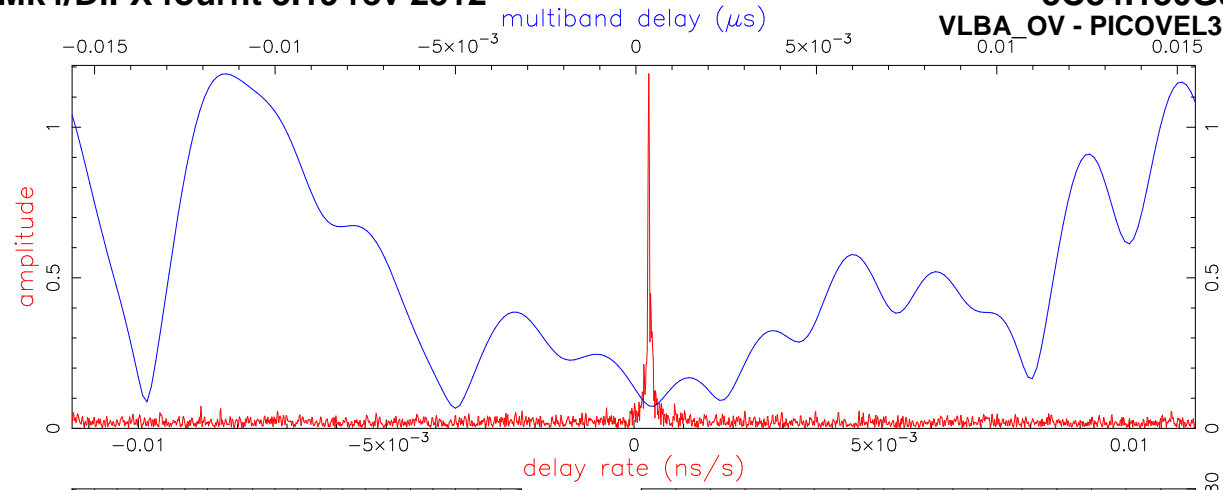


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|------------------|--------------------------|-----------------|----------|--|----------|---------------------------|----------------------|--|----------|------------------|----------|--------------|-------------|------------|-------|
| | -16.1 | -2.0 | 34.4 | 1.0 | 10.1 | 6.1 | -14.3 | -7.1 | 47.7 | -97.9 | 12.7 | -3.6 | 120.7 | 15.0 | -9.5 | 1.6 | Phase | 3.9 |
| | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.2 | Ampl. | 0.2 |
| | 56.5 | 159.9 | 32.4 | 89.7 | 32.3 | 217.8 | 107.3 | 174.9 | 216.2 | 23.7 | 95.7 | 58.2 | 96.3 | 19.8 | 137.8 | 220.0 | Sbd box | 217.6 |
| UL | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| ni | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| ni | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Chan ids | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Tracks | |
| | | | | | | | | | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 1.40391518489E+04 | | | Apriori delay (usec) | | | 1.40384495879E+04 | | | Resid mbdelay (usec) | | | 1.47610E-02 | | | +/- 1.5E-04 | | |
| Sband delay (usec) | 1.40391417004E+04 | | | Apriori clock (usec) | | | 2.7049849E+01 | | | Resid sbdelay (usec) | | | 6.92113E-01 | | | +/- 2.5E-03 | | |
| Phase delay (usec) | 1.40384495881E+04 | | | Apriori clockrate (us/s) | | | 4.8722349E-07 | | | Resid phdelay (usec) | | | 1.27010E-07 | | | +/- 5.3E-07 | | |
| Delay rate (us/s) | 8.03226398982E-01 | | | Apriori rate (us/s) | | | 8.03216019513E-01 | | | Resid rate (us/s) | | | 1.03795E-05 | | | +/- 1.9E-09 | | |
| Total phase (deg) | 185.7 | | | Apriori accel (us/s/s) | | | -6.97747228440E-05 | | | Resid phase (deg) | | | 3.9 | | | +/- 16.4 | | |
| ph/seg (deg) | RMS | Theor. | Amplitude | | 0.169 +/- 0.024 | | 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 | | | |
| amp/seg (%) | 26.5 | 28.4 | Search (2048X64) | | 0.104 | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | SampCntNorm: enabled | | mb window (us) | | -0.016 0.016 | | | | | |
| ph/frq (deg) | 44.9 | 49.6 | Interp. | | 0.000 | | Bits/sample: 2x2 | | Sample rate(MISamp/s): 64 | | dr window (ns/s) | | -0.011 0.011 | | | | | |
| amp/frq (%) | 44.9 | 32.8 | Inc. seg. avg. | | 0.163 | | Data rate(Mb/s): 2048 | | nlags: 128 | | t_cohere infinite | | ion window (TEC) | | 0.00 0.00 | | | |
| | 52.5 | 57.3 | Inc. frq. avg. | | 0.159 | | | | | | | | | | | | | |

n: az 270.2 el 84.8 pa 84.7 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6267.092 -4383.606 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ni..130G9L Output file: /Exps/c192b/v2/1234/No0205/ni.W.335.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

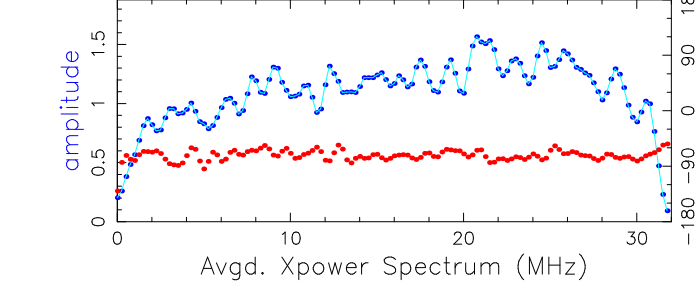
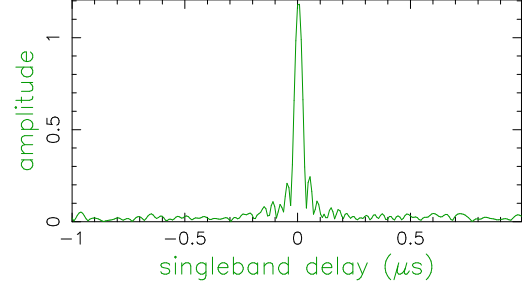
3C84.130G9L, No0205, oi
VLBA_OV - PICOVEL3, fgroup W, pol LL



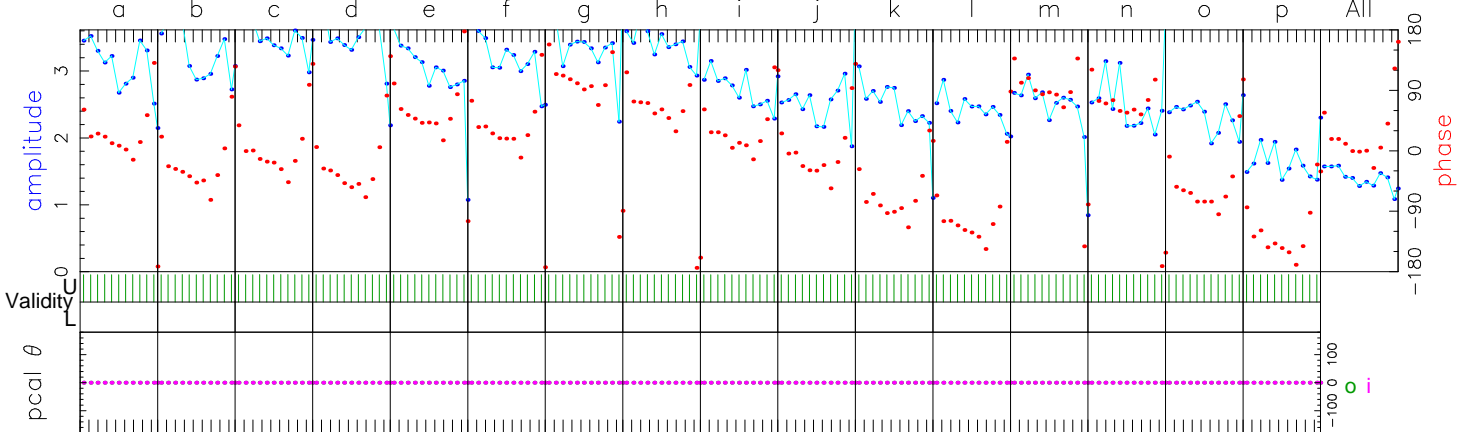
Fringe quality 2

SNR 72.0
Int time 476.783
Amp 1.205
Phase 17.5
PFD 0.0e+00
Delays (us)
SBD 0.004039
MBD -0.011381
Fringe rate (Hz) 0.025487
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112427
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | | | | | | | | |
|-------------------------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|----------|----------------------|--------------------------|----------------------|----------------------|-------------|---------|---------|
| UL | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | | | | | | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | | | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | | | | | |
| oi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | | | | | |
| oi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | | | | | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | | | | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | | | | | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | | | Chan ids | | | | | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | | | Tracks | | | | | | |
| | | | | | | | | | | | | | | | | | | | | Tracks | | | | | | |
| Group delay (usec)(sbd) | | 1.34064114054E+04 | | | | | | | | | | | | | | | | | | Apriori delay (usec) | 1.34064227867E+04 | Resid mbdelay (usec) | -1.13813E-02 | +/- | 1.5E-05 | |
| Sband delay (usec) | | 1.34064268257E+04 | | | | | | | | | | | | | | | | | | | Apriori clock (usec) | 1.7188820E+01 | Resid sbdelay (usec) | 4.03900E-03 | +/- | 2.4E-04 |
| Phase delay (usec) | | 1.34064227873E+04 | | | | | | | | | | | | | | | | | | | Apriori clockrate (us/s) | 3.5398100E-07 | Resid phdelay (usec) | 5.63874E-07 | +/- | 5.1E-08 |
| Delay rate (us/s) | | 1.22058996780E+00 | | | | | | | | | | | | | | | | | | | Apriori rate (us/s) | 1.22058967193E+00 | Resid rate (us/s) | 2.95873E-07 | +/- | 1.9E-10 |
| Total phase (deg) | | | | | 322.2 | | | | | | | | | | | | | | | | Apriori accel (us/s/s) | -7.10364597663E-05 | Resid phase (deg) | 17.5 | +/- | 1.6 |

ph/seg (deg) 38.9 2.8
amp/seg (%) 20.4 4.8
ph/frq (deg) 75.2 3.2
amp/frq (%) 101.0 5.6

RMS Theor. Amplitude 1.205 +/- 0.017
Search (2048X64) 1.142
Interp. 0.000
Inc. seg. avg. 1.402
Inc. frq. avg. 2.341

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): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

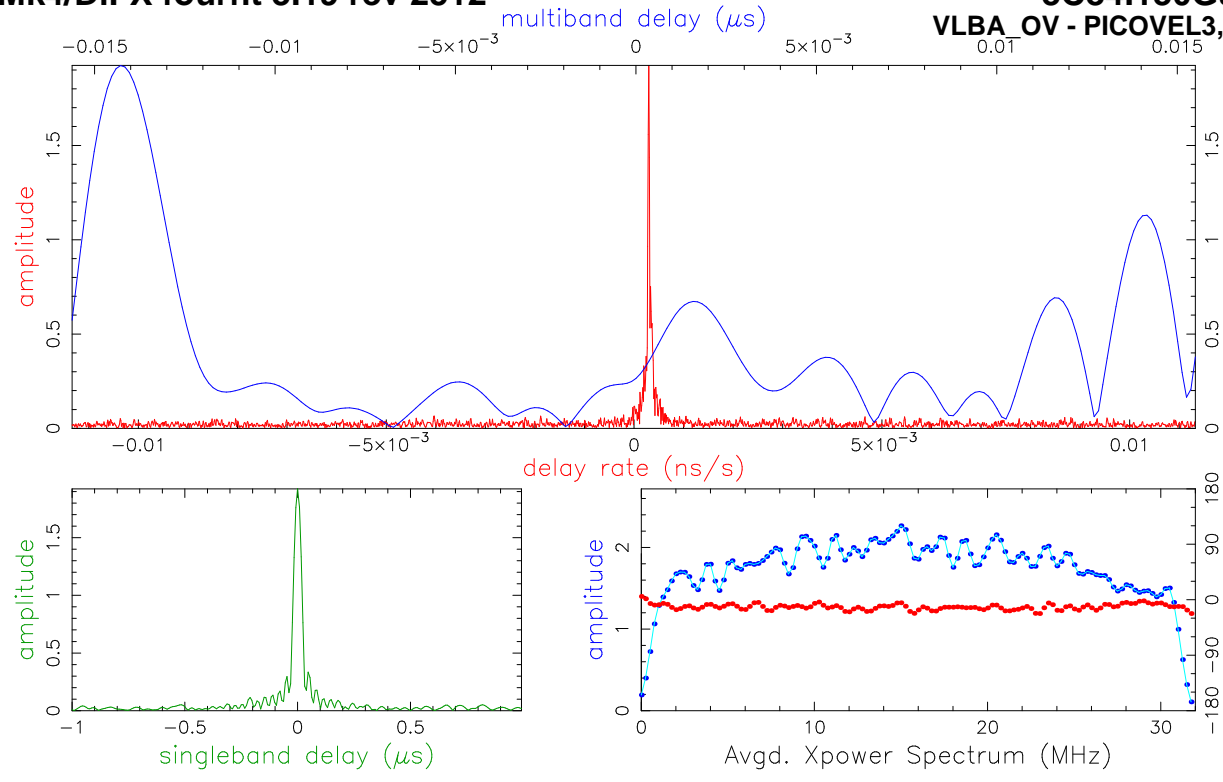
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

o: az 68.0 el 74.1 pa -98.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -9463.250 -4845.317 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/oi..130G9L Output file: /Exps/c192b/v2/1234/No0205/oi.W.315.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, oi
VLBA_OV - PICOVEL3, fgroup W, pol RR

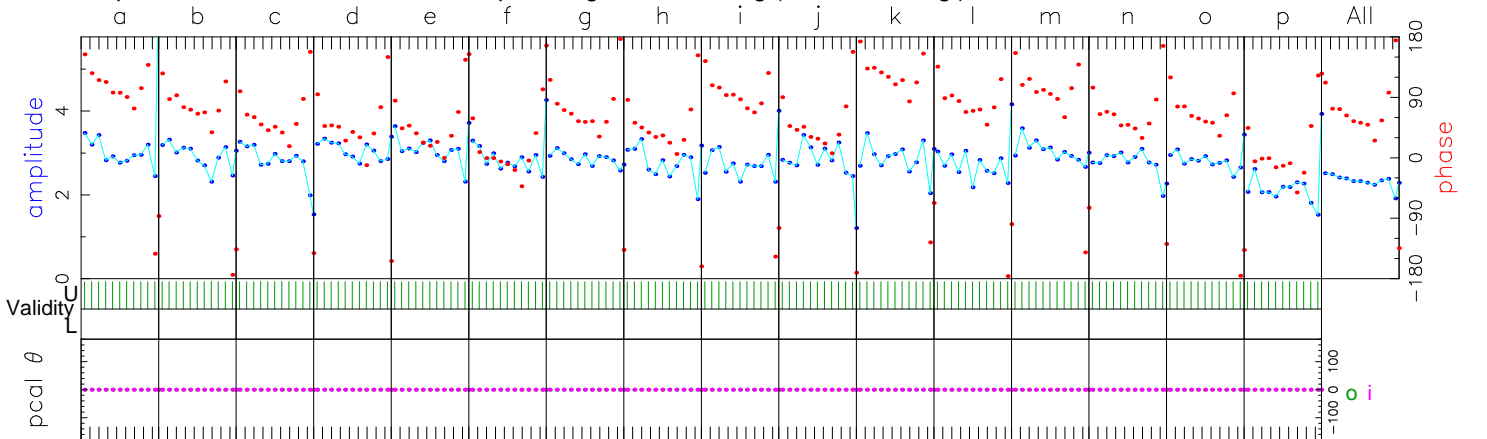


Fringe quality 3

SNR 114.9
Int time 476.784
Amp 1.924
Phase 70.7
PFD 0.0e+00
Delays (us)
SBD 0.000071
MBD -0.014259
Fringe rate (Hz) 0.025531
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112432
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|-------|
| U/L | 116.9 | 87.5 | 60.0 | 49.0 | 43.2 | 8.5 | 72.0 | 46.1 | 102.9 | 46.1 | 131.0 | 91.1 | 111.3 | 64.3 | 74.2 | -0.2 | | Phase | 70.7 |
| o | 2.5 | 2.4 | 2.4 | 2.4 | 2.5 | 2.3 | 2.4 | 2.3 | 2.2 | 2.4 | 2.4 | 2.2 | 2.5 | 2.4 | 2.2 | 1.7 | | Ampl. | 2.3 |
| i | 128.6 | 129.0 | 129.1 | 128.9 | 128.9 | 128.7 | 129.0 | 128.9 | 128.7 | 128.5 | 128.7 | 128.9 | 128.7 | 128.4 | 128.8 | 127.2 | | Sbd box | 129.0 |
| o | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs | |
| o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | ManI PC | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp | |
| o | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks | |

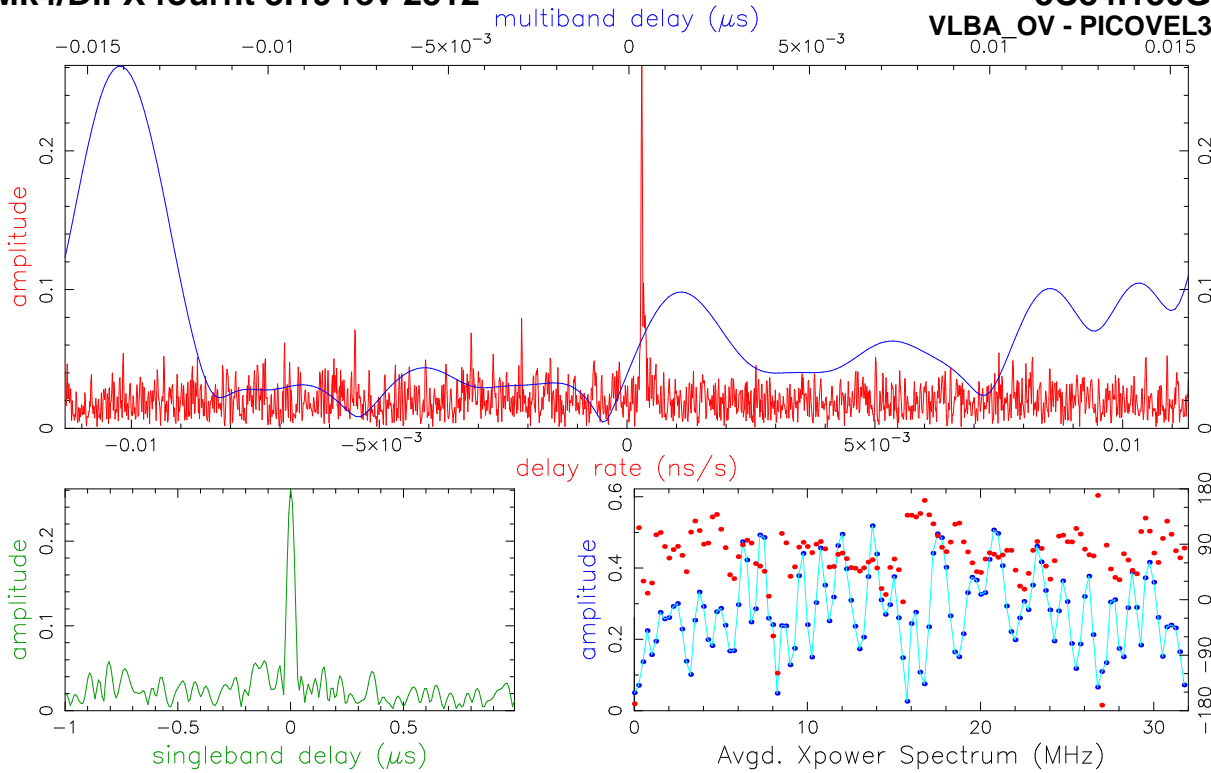
Group delay (usec)(sbd) 1.34064085279E+04 Apriori delay (usec) 1.34064227867E+04 Resid mbdelay (usec) -1.42588E-02 +/- 9.4E-06
 Sband delay (usec) 1.34064228577E+04 Apriori clock (usec) 1.7188820E+01 Resid sbdelay (usec) 7.10000E-05 +/- 1.5E-04
 Phase delay (usec) 1.34064227890E+04 Apriori clockrate (us/s) 3.5398100E-07 Resid phdelay (usec) 2.28068E-06 +/- 3.2E-08
 Delay rate (us/s) 1.22058996832E+00 Apriori rate (us/s) 1.22058967193E+00 Resid rate (us/s) 2.96388E-07 +/- 1.2E-10
 Total phase (deg) 15.5 Apriori accel (us/s/s) -7.10364597663E-05 Resid phase (deg) 70.7 +/- 1.0

RMS Theor. Amplitude 1.924 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.6 1.7 Search (2048X64) 1.859 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 22.7 3.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 38.4 2.0 Inc. seg. avg. 2.333 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 23.2 3.5 Inc. frq. avg. 2.325 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 68.0 el 74.1 pa -98.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -9463.250 -4845.317 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/oi..130G9L Output file: /Exps/c192b/v2/1234/No0205/oi.W.330.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, oi
VLBA_OV - PICOVEL3, fgroup W, pol LR

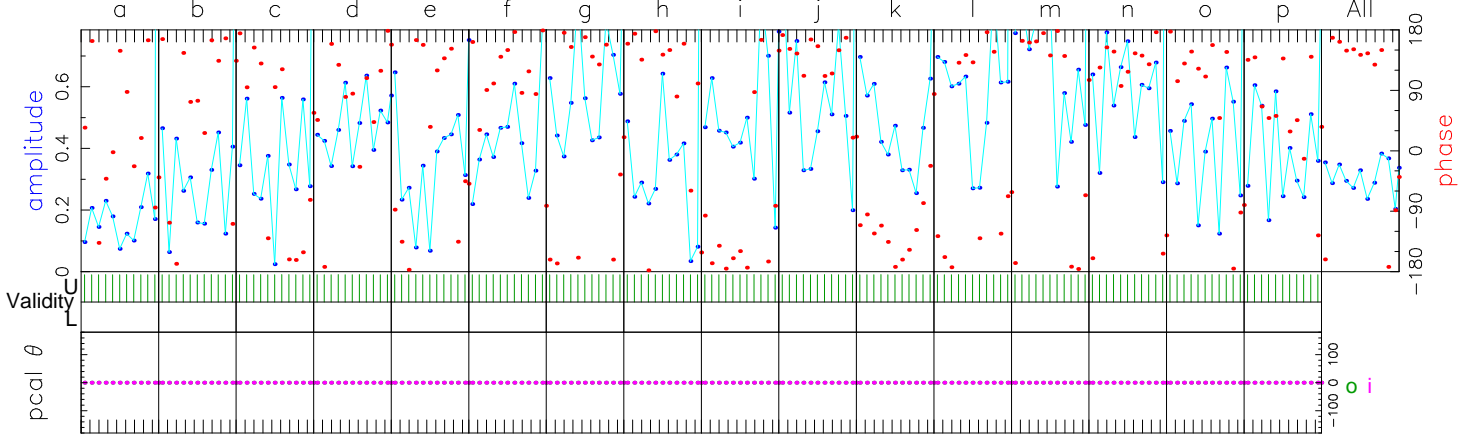


Fringe quality 9

SNR 15.6
Int time 476.783
Amp 0.262
Phase 163.1
PFD 0.0e+00
Delays (us)
SBD 0.000960
MBD -0.014093
Fringe rate (Hz) 0.025422
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112437
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

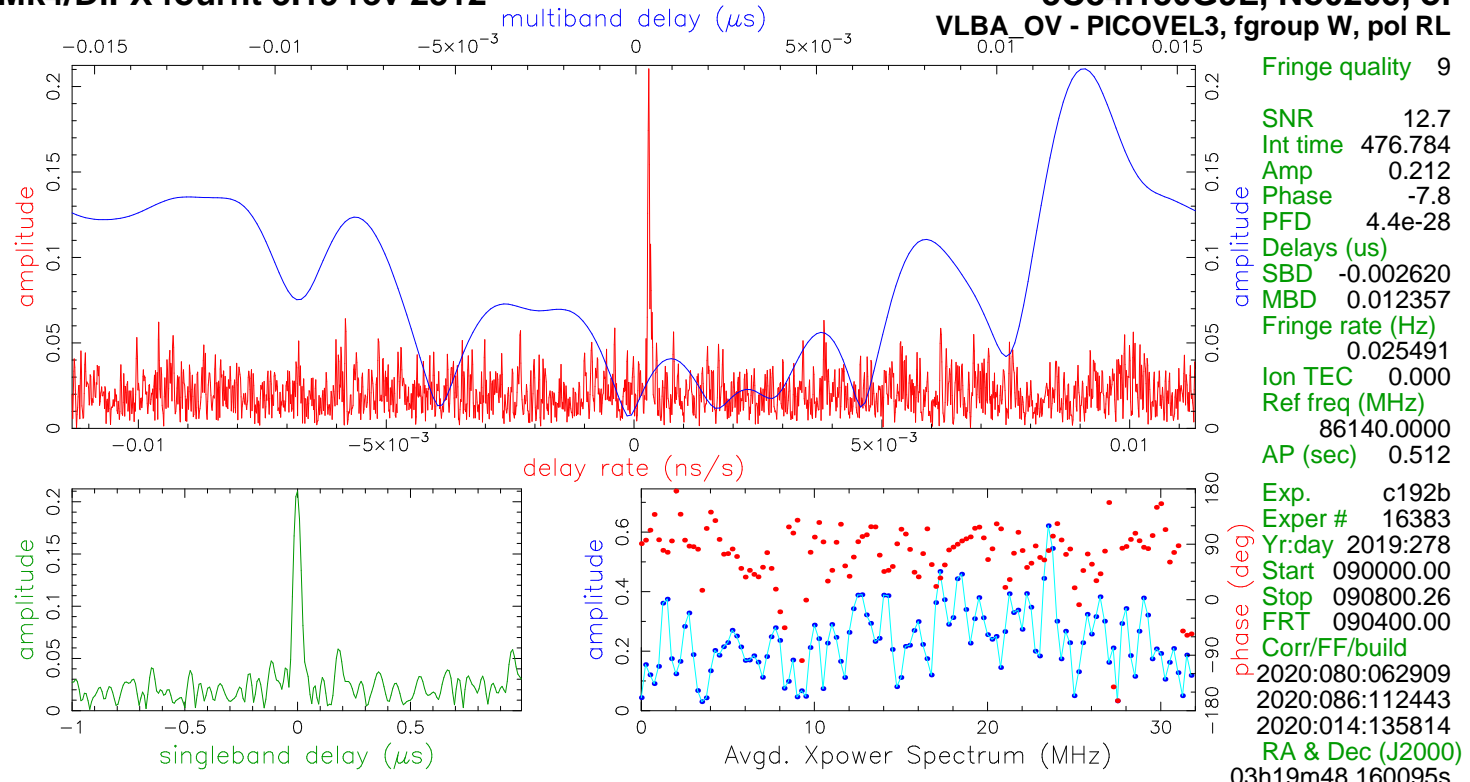


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-------------------------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|--------------------|----------|----------|----------|----------|----------|----------|----------------------|--------------|-------------|
| | -34.9 | 157.7 | 169.4 | 105.6 | -167.9 | 130.6 | 178.2 | 149.8 | -165.4 | 145.0 | -113.2 | -170.8 | 170.1 | 147.0 | 149.4 | 87.9 | Phase | 163.1 | |
| | 0.0 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.6 | 0.5 | 0.3 | 0.2 | Ampl. | 0.3 | |
| | 45.4 | 107.8 | 27.0 | 128.1 | 102.2 | 128.6 | 129.5 | 128.6 | 129.1 | 129.0 | 128.3 | 129.2 | 128.5 | 128.7 | 128.4 | 126.8 | Sbd box | 129.1 | |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | | |
| oi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | | |
| | | | | | | | | | | | | | | | | | Chan ids | | |
| | | | | | | | | | | | | | | | | | Tracks | | |
| Group delay (usec)(sbd) | | 1.34064086933E+04 | | | | | | | | 1.34064227867E+04 | | | | | | | Resid mbdelay (usec) | -1.40934E-02 | +/- 6.9E-05 |
| Sband delay (usec) | | 1.34064237467E+04 | | | | | | | | 1.7188820E+01 | | | | | | | Resid sbdelay (usec) | 9.60000E-04 | +/- 1.1E-03 |
| Phase delay (usec) | | 1.34064227920E+04 | | | | | | | | 3.5398100E-07 | | | | | | | Resid phdelay (usec) | 5.26017E-06 | +/- 2.4E-07 |
| Delay rate (us/s) | | 1.22058996705E+00 | | | | | | | | 1.22058967193E+00 | | | | | | | Resid rate (us/s) | 2.95121E-07 | +/- 8.5E-10 |
| Total phase (deg) | | | | 107.9 | | | | | | -7.10364597663E-05 | | | | | | | Resid phase (deg) | 163.1 | +/- 7.3 |

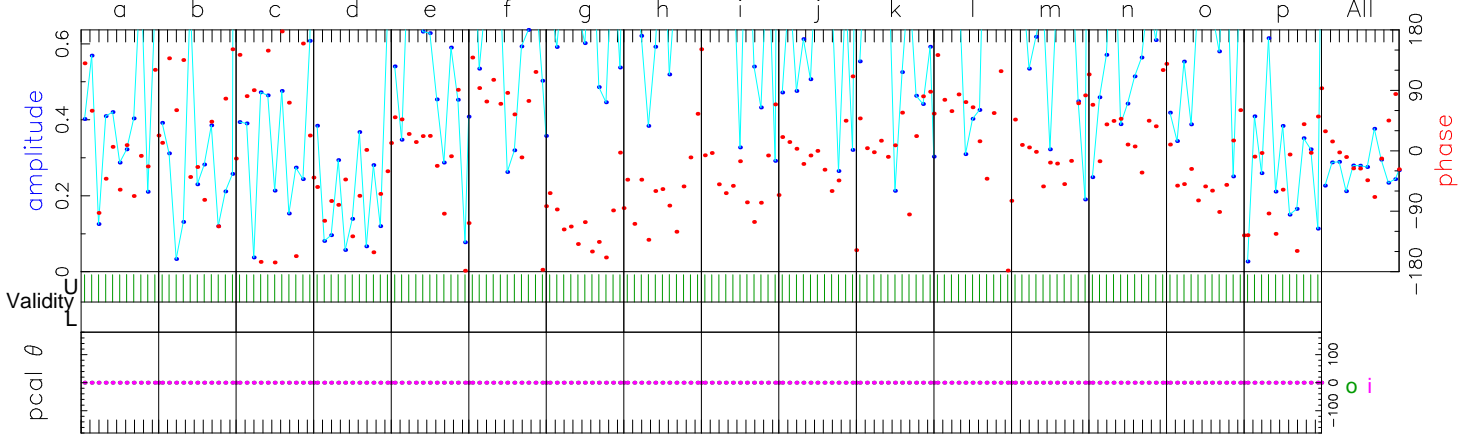
ph/seg (deg) 39.1 12.7 Search (2048X64) 0.250 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 26.7 22.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 58.0 14.7 Inc. seg. avg. 0.299 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 57.4 25.6 Inc. frq. avg. 0.306 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 68.0 el 74.1 pa -98.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -9463.250 -4845.317 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/oi..130G9L Output file: /Exps/c192b/v2/1234/No0205/oi.W.346.130G9L simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, oi
VLBA_OV - PICOVEL3, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

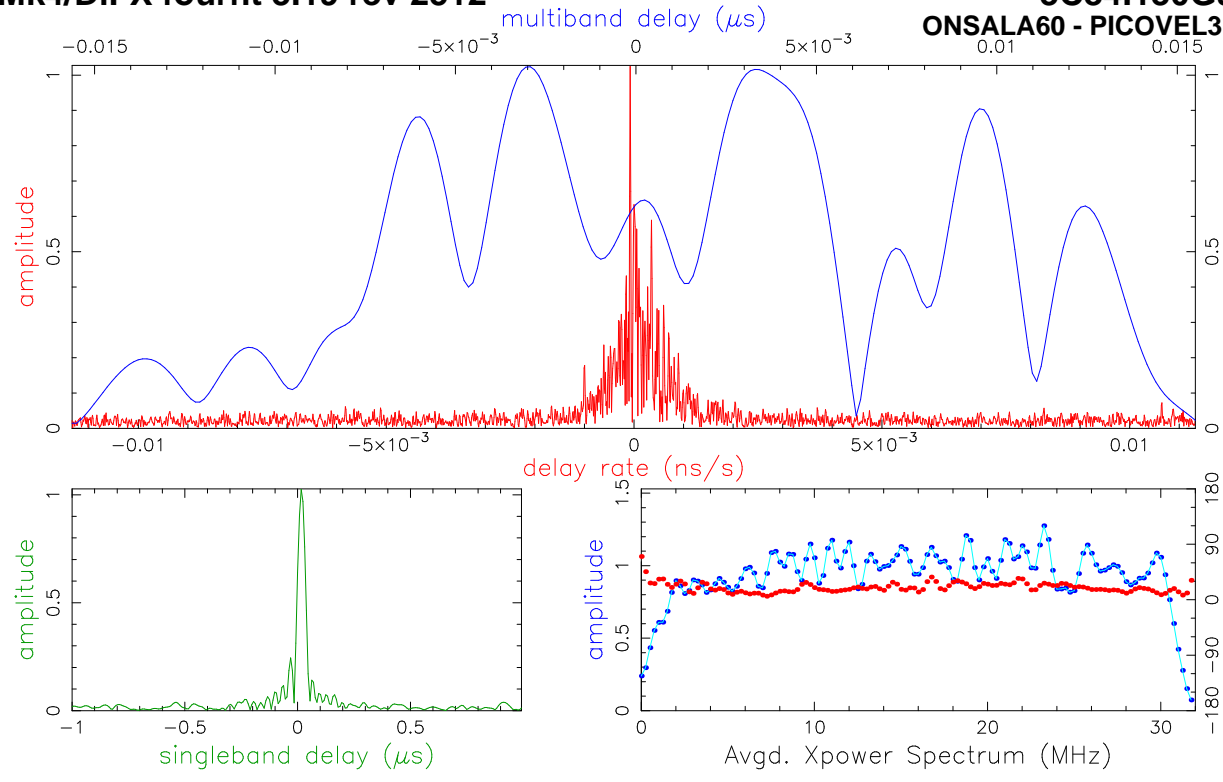


| | | | | | | | | | | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|--|
| 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
| 8.0 | 3.6 | 146.6 | -64.4 | 20.5 | 94.3 | -109.7 | -59.9 | -42.5 | -2.9 | 17.4 | 73.7 | -1.1 | 35.9 | -42.4 | -35.9 | Phase | -7.8 | |
| 0.2 | 0.1 | 0.2 | 0.2 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.2 | Ampl. | 0.4 | |
| 164.3 | 144.0 | 99.2 | 80.4 | 129.4 | 129.5 | 129.3 | 129.1 | 129.2 | 128.7 | 129.3 | 128.8 | 129.0 | 128.5 | 129.5 | 126.9 | Sbd box | 128.7 | |
| UL 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | | |
| o 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| i 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| oi 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | |
| oi 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | | |
| o 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| i 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| o | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Chan ids | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Tracks | |

Group delay (usec)(sbd) 1.34064351435E+04 Apriori delay (usec) 1.34064227867E+04 Resid mbdelay (usec) 1.23568E-02 +/- 8.5E-05
 Sband delay (usec) 1.34064201672E+04 Apriori clock (usec) 1.7188820E+01 Resid sbdelay (usec) -2.61950E-03 +/- 1.4E-03
 Phase delay (usec) 1.34064227865E+04 Apriori clockrate (us/s) 3.5398100E-07 Resid phdelay (usec) -2.51302E-07 +/- 2.9E-07
 Delay rate (us/s) 1.22058996785E+00 Apriori rate (us/s) 1.22058967193E+00 Resid rate (us/s) 2.95922E-07 +/- 1.1E-09
 Total phase (deg) 296.9 Apriori accel (us/s/s) -7.10364597663E-05 Resid phase (deg) -7.8 +/- 9.0

ph/seg (deg) RMS Theor. Amplitude 0.212 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.3 15.7 Search (2048X64) 0.202 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.8 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 67.7 18.1 Inc. seg. avg. 0.263 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 102.2 31.6 Inc. frq. avg. 0.352 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 68.0 el 74.1 pa -98.6 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -9463.250 -4845.317 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/oi..130G9L Output file: /Exps/c192b/v2/1234/No0205/oi.W.369.130G9L

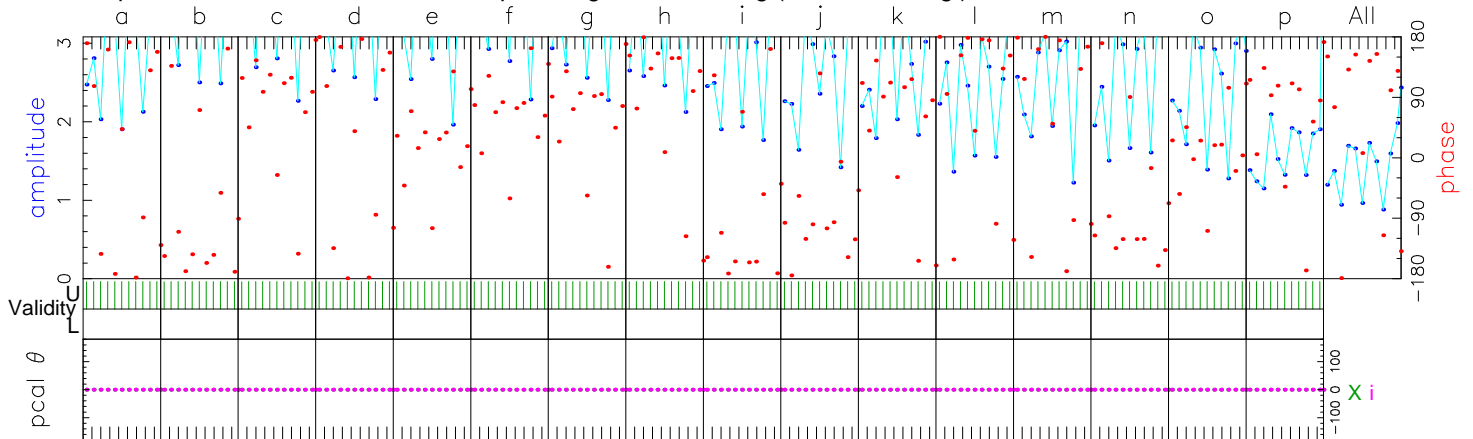


Fringe quality 1

SNR 61.5
 Int time 479.076
 Amp 1.028
 Phase 135.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.017058
 MBD -0.002975
 Fringe rate (Hz)
 -0.006941
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

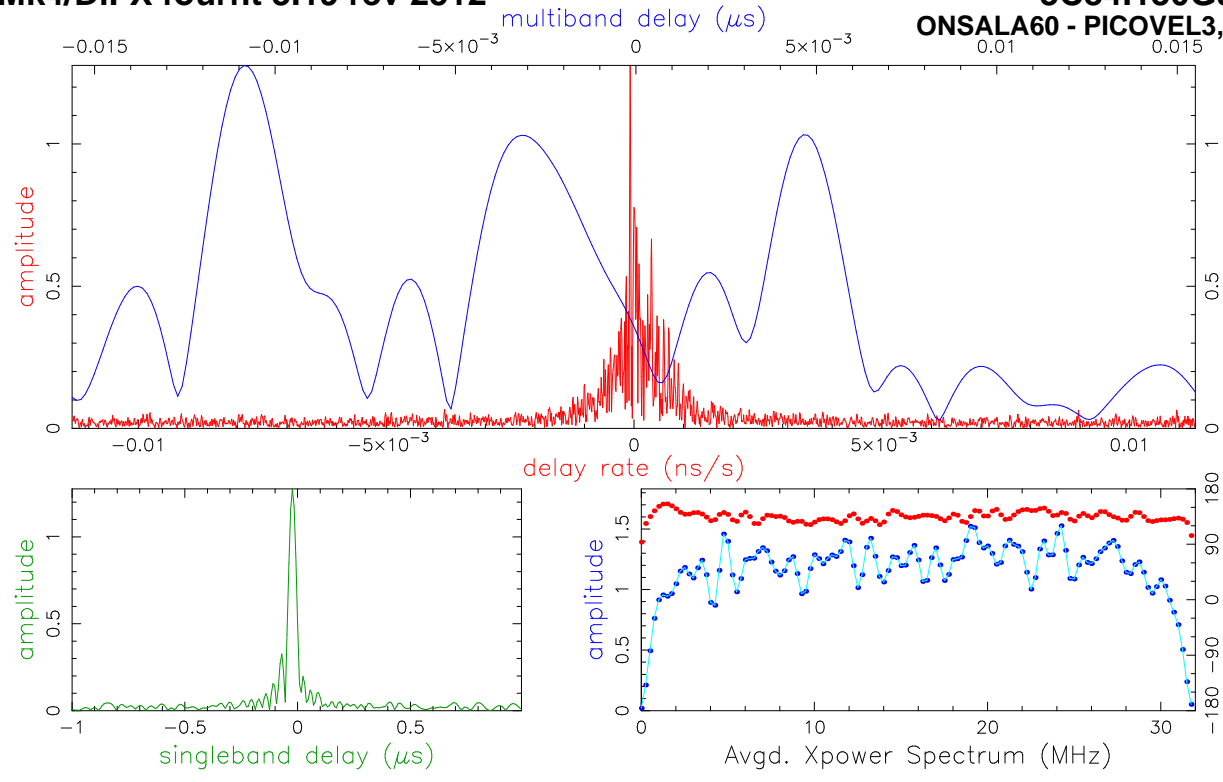
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112431
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



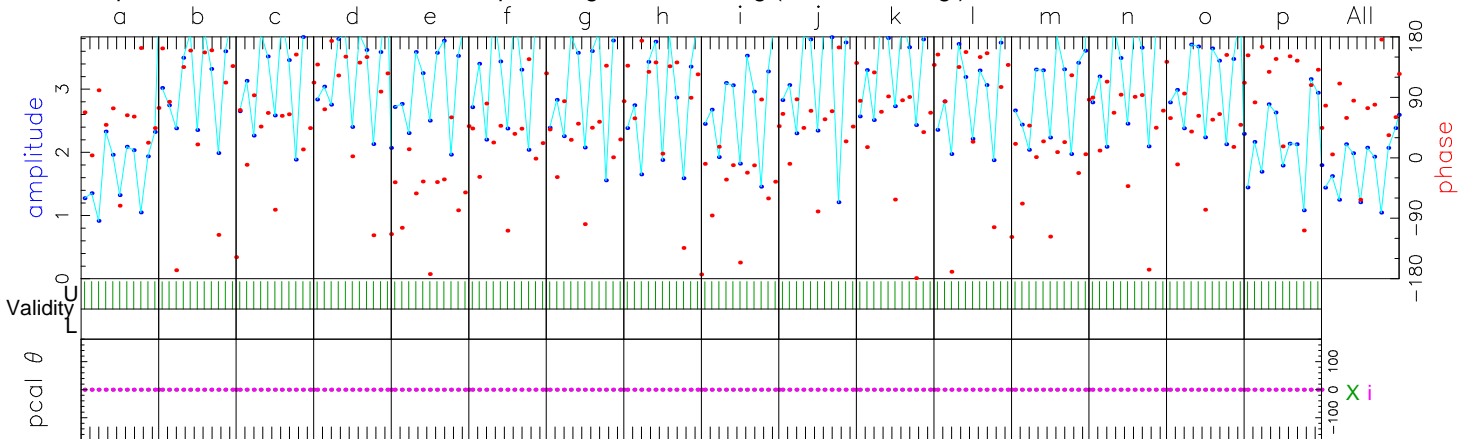
| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|--|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Xi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| Xi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| X | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| Group delay (usec)(sbd) | | 1.61961484980E+03 | | | | | | | | | | | | | | | | |
| Sband delay (usec) | | 1.61960363184E+03 | | | | | | | | | | | | | | | | |
| Phase delay (usec) | | 1.61958657869E+03 | | | | | | | | | | | | | | | | |
| Delay rate (us/s) | | 3.38746967883E-01 | | | | | | | | | | | | | | | | |
| Total phase (deg) | | | | 320.0 | | | | | | | | | | | | | | |
| Apriori delay (usec) | | | | | | | | | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | | | | | | | | | |
| PCal mode: MANUAL, MANUAL | | | | | | | | | | | | | | | | | | |
| PCal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | | | | | | | | | |
| sb window (us) | | | | | | | | | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | | | | | | | | | |
| SampCntNorm: enabled | | | | | | | | | | | | | | | | | | |
| Sample rate(MISamp/s): 64 | | | | | | | | | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | | | | | | | | | |
| nlags: 128 | | | | | | | | | | | | | | | | | | |
| t_cohere infinite | | | | | | | | | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | | | | | | | | | |

ph/seg (deg) 57.5 3.2 Search (2048X64) 0.990 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.8 5.6 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 72.1 3.7 Inc. seg. avg. 1.410 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 122.5 6.5 Inc. frq. avg. 2.200 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 309.5 el 24.7 pa 33.4 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -2580.071 2276.387 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xi.W.329.130G9L



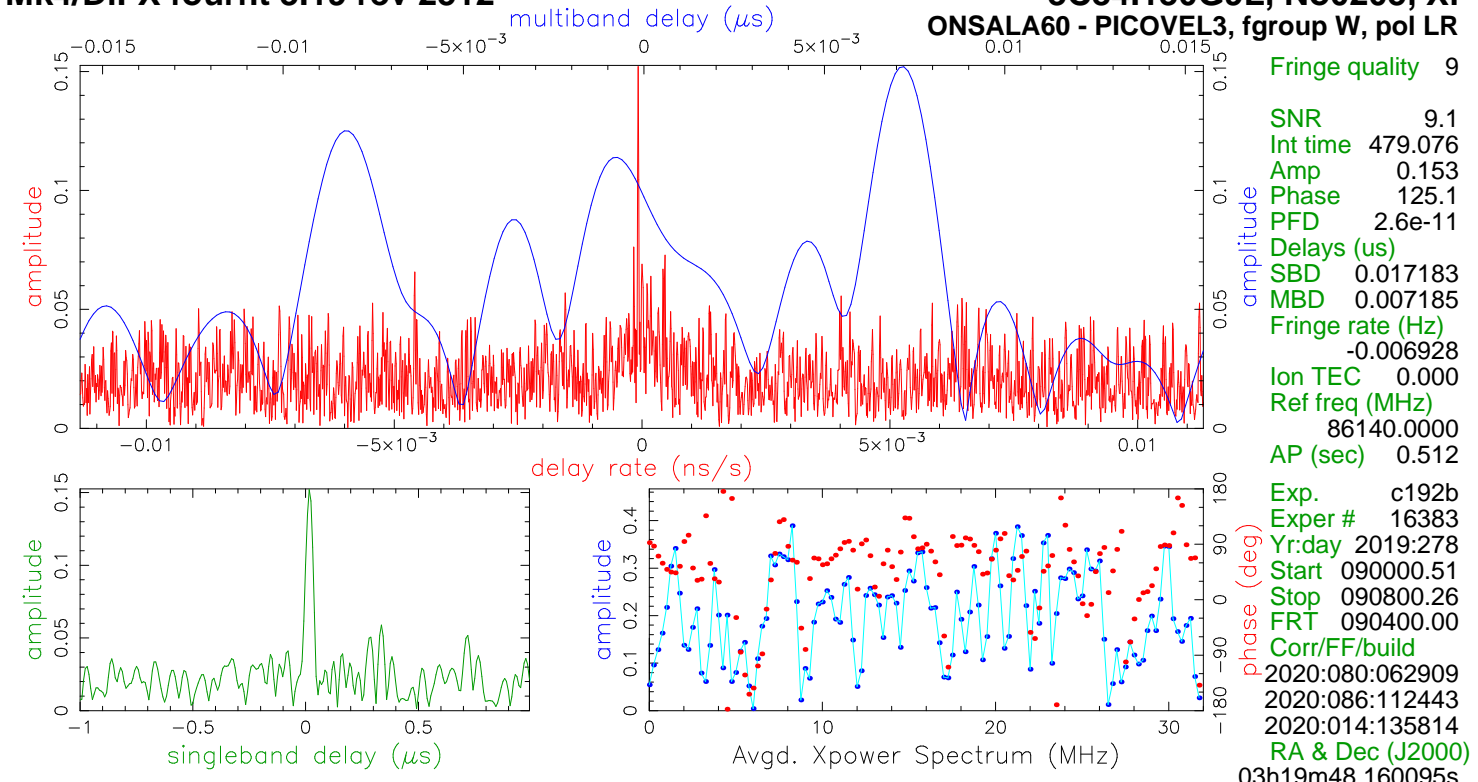
Fringe quality 1
 SNR 76.4
 Int time 479.076
 Amp 1.277
 Phase 64.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.023180
 MBD -0.010828
 Fringe rate (Hz)
 -0.006938
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112437
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

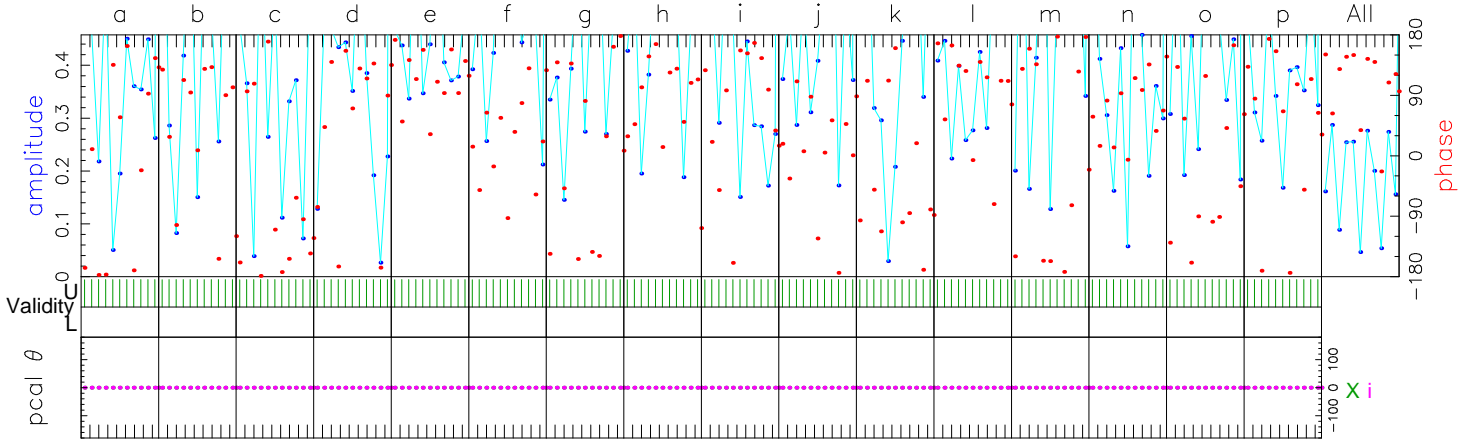


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|--|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|
| U/L | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Xi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| Xi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| X | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Tracks |
| Group delay (usec)(sbd) | | 1.61957574605E+03 | | | | | | | | | | | | | | | | |
| Sband delay (usec) | | 1.61956339384E+03 | | | | | | | | | | | | | | | | |
| Phase delay (usec) | | 1.61958657641E+03 | | | | | | | | | | | | | | | | |
| Delay rate (us/s) | | 3.38746967916E-01 | | | | | | | | | | | | | | | | |
| Total phase (deg) | | | 249.2 | | | | | | | | | | | | | | | |
| 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(MSamp/s): 64 | | | | | | | | | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | | | | | | | | | |
| sb window (us) | | | | | | | | | | | | | | | | | | |
| mb window (us) | | | | | | | | | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | | | | | | | | | |

ph/seg (deg) 57.3 2.6 Search (2048X64) 1.230 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.5 4.5 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.2 3.0 Inc. seg. avg. 1.741 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 74.3 5.2 Inc. frq. avg. 2.172 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 309.5 el 24.7 pa 33.4 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -2580.071 2276.387 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xi.W.347.130G9L

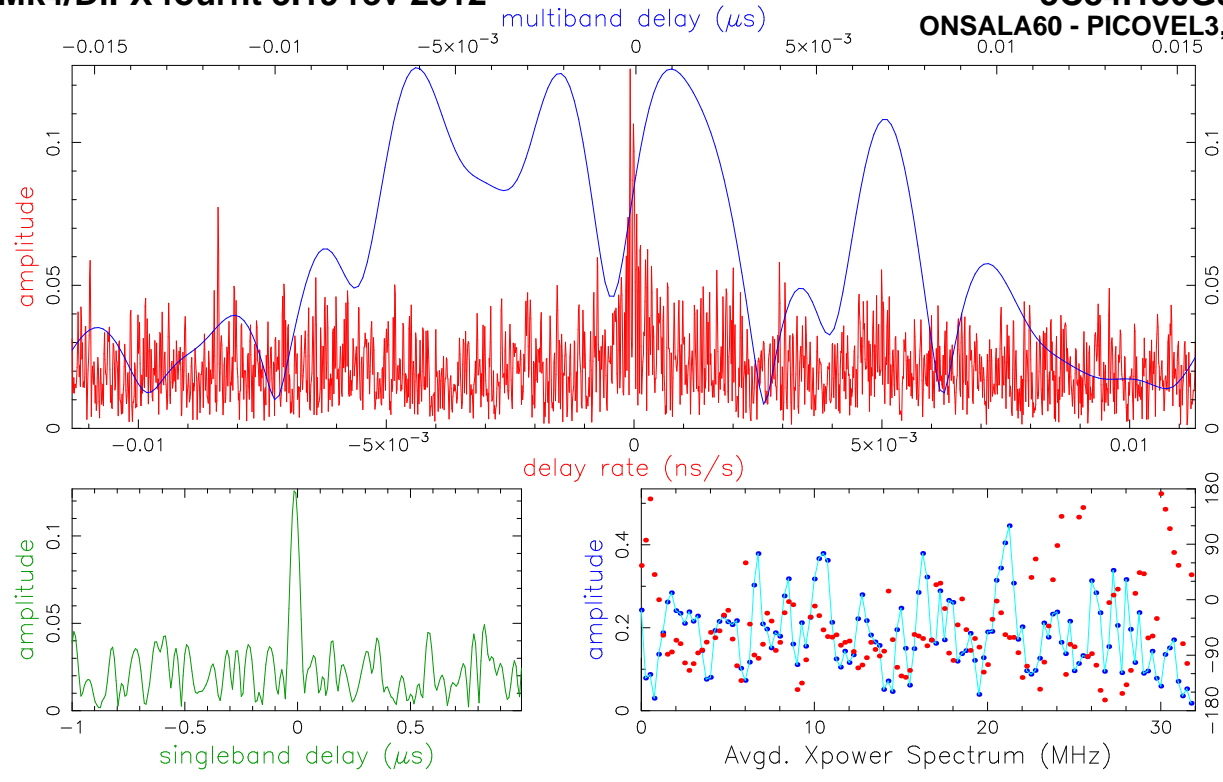


Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



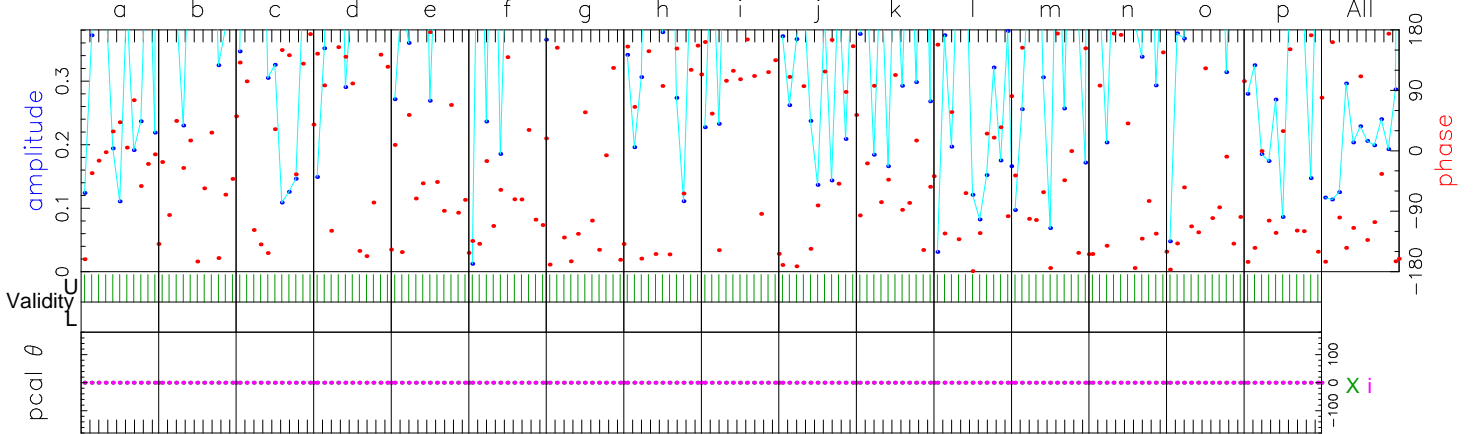
| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-------------------------|----------|----------|-------------------|----------|----------|----------|--------------------------|-------------------|----------|----------|----------|----------------------|--------------|----------|----------|----------|------------|---------|---------|
| | 158.0 | 110.9 | -153.8 | 124.4 | 116.0 | 16.9 | -176.6 | 100.5 | 120.0 | 26.8 | -89.4 | 120.5 | 171.1 | 74.9 | -166.8 | 131.7 | Phase | 125.1 | |
| | 0.2 | 0.4 | 0.2 | 0.2 | 0.4 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | Ampl. | 0.2 | |
| | 165.1 | 131.0 | 130.9 | 130.7 | 131.5 | 131.5 | 130.9 | 131.8 | 149.0 | 130.7 | 197.2 | 116.2 | 131.4 | 130.2 | 35.4 | 129.5 | Sbd box | 131.2 | |
| U/L | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | APs used | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| Xi | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| X:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | |
| X:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| X | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | | |
| | | | | | | | | | | | | | | | | | Chan ids | | |
| | | | | | | | | | | | | | | | | | Tracks | | |
| Group delay (usec)(sbd) | | | 1.61959375930E+03 | | | | Apriori delay (usec) | 1.61958657434E+03 | | | | Resid mbdelay (usec) | 7.18496E-03 | | | | +/- | 1.2E-04 | |
| Sband delay (usec) | | | 1.61960375784E+03 | | | | Apriori clock (usec) | 3.2923355E+01 | | | | Resid sbdelay (usec) | 1.71835E-02 | | | | | +/- | 1.9E-03 |
| Phase delay (usec) | | | 1.61958657837E+03 | | | | Apriori clockrate (us/s) | 8.8100003E-07 | | | | Resid phdelay (usec) | 4.03348E-06 | | | | | +/- | 4.0E-07 |
| Delay rate (us/s) | | | 3.38746968038E-01 | | | | Apriori rate (us/s) | 3.38747048460E-01 | | | | Resid rate (us/s) | -8.04220E-08 | | | | | +/- | 1.5E-09 |
| Total phase (deg) | | | | 310.0 | | | Apriori accel (us/s/s) | 9.51287512789E-06 | | | | Resid phase (deg) | 125.1 | | | | | +/- | 12.5 |

ph/seg (deg) 57.3 21.7 Search (2048X64) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.4 37.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.5 25.1 Inc. seg. avg. 0.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 83.4 43.8 Inc. frq. avg. 0.234 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 309.5 el 24.7 pa 33.4 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -2580.071 2276.387 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xi.W.367.130G9L



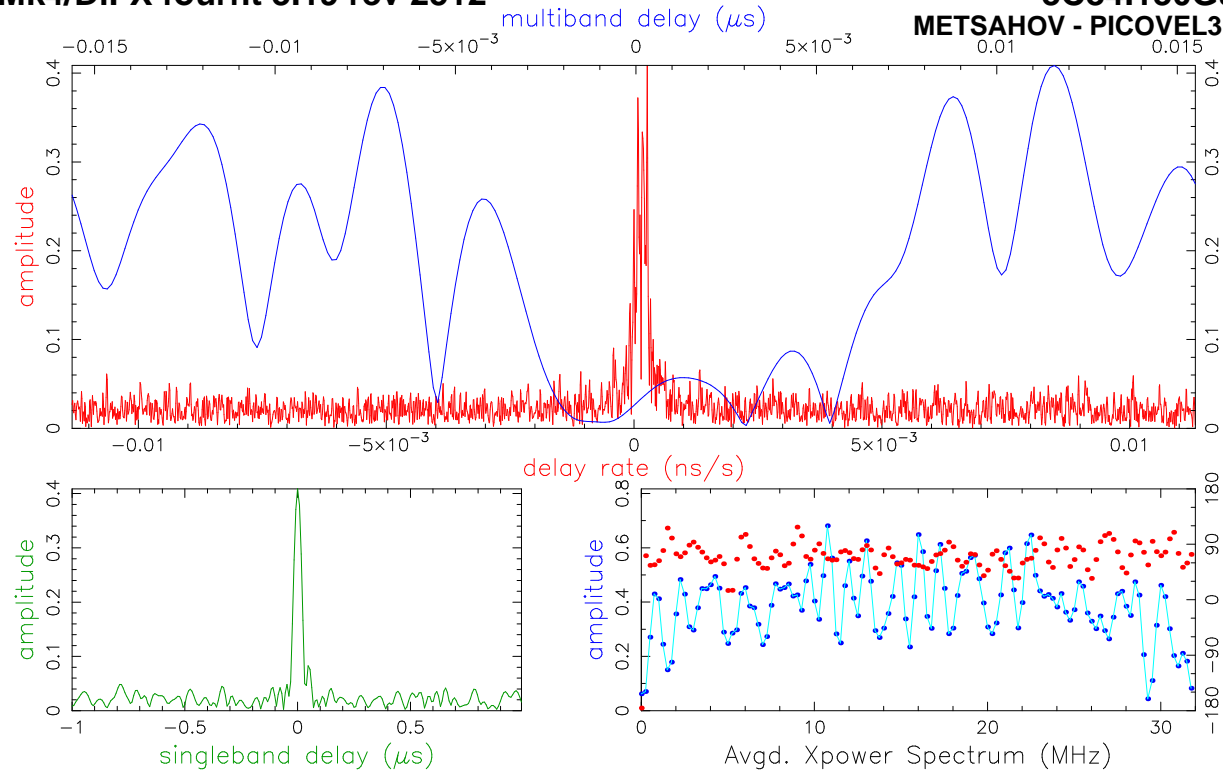
Fringe quality 9
SNR 7.6
Int time 479.076
Amp 0.127
Phase -144.6
PFD 9.8e-06
Delays (us)
SBD -0.012347
MBD 0.000982
Fringe rate (Hz)
-0.006898
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112448
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All | |
|-------------------------|----------|----------|-------------------|----------|----------|----------|----------|----------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------------------|--------------|-------------|
| | -9.2 | -28.3 | 170.0 | 161.6 | -63.4 | -98.8 | -156.4 | 165.3 | 124.6 | 151.3 | -78.4 | -84.1 | -111.6 | -166.4 | -111.5 | -142.0 | Phase | -144.6 | |
| | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | Ampl. | 0.2 | |
| | 127.2 | 101.6 | 138.9 | 126.8 | 125.7 | 127.8 | 126.6 | 127.6 | 126.0 | 52.7 | 186.9 | 109.6 | 47.1 | 126.8 | 126.2 | 126.0 | Sbd box | 127.4 | |
| U/L | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | 937/0 | APs used | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| X:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | |
| X:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | | |
| X | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| X | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Chan ids | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Tracks | | |
| | | | | | | | | | | | | | | | | | Tracks | | |
| Group delay (usec)(sbd) | | | 1.61958755627E+03 | | | | | | | 1.61958657434E+03 | | | | | | | Resid mbdelay (usec) | 9.81929E-04 | +/- 1.4E-04 |
| Sband delay (usec) | | | 1.61957422684E+03 | | | | | | | 3.2923355E+01 | | | | | | | Resid sbdelay (usec) | -1.23475E-02 | +/- 2.3E-03 |
| Phase delay (usec) | | | 1.61958656968E+03 | | | | | | | 8.8100003E-07 | | | | | | | Resid phdelay (usec) | -4.66203E-06 | +/- 4.9E-07 |
| Delay rate (us/s) | | | 3.38746968384E-01 | | | | | | | 3.38747048460E-01 | | | | | | | Resid rate (us/s) | -8.00762E-08 | +/- 1.8E-09 |
| Total phase (deg) | | | | 40.3 | | | | | | 9.51287512789E-06 | | | | | | | Resid phase (deg) | -144.6 | +/- 15.1 |

RMS Theor. Amplitude 0.127 +/- 0.017
 ph/seg (deg) 54.8 26.1 Search (2048X64) 0.123
 amp/seg (%) 79.0 45.6 Interp. 0.000
 ph/frq (deg) 71.3 30.2 Inc. seg. avg. 0.183
 amp/frq (%) 122.8 52.7 Inc. frq. avg. 0.227
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 309.5 el 24.7 pa 33.4 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -2580.071 2276.387 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xi.W.388.130G9L

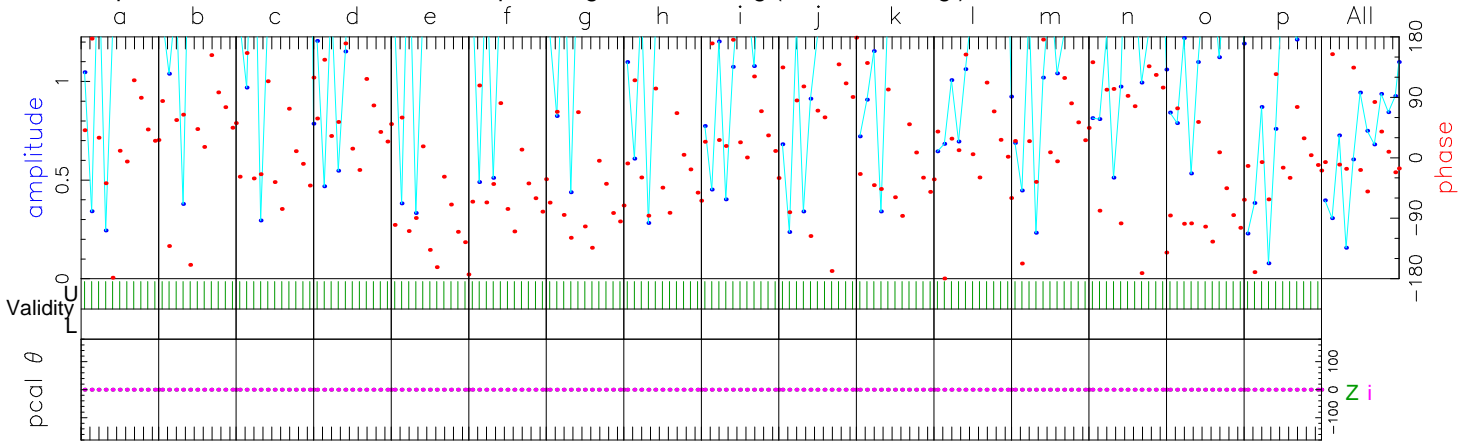


Fringe quality 5

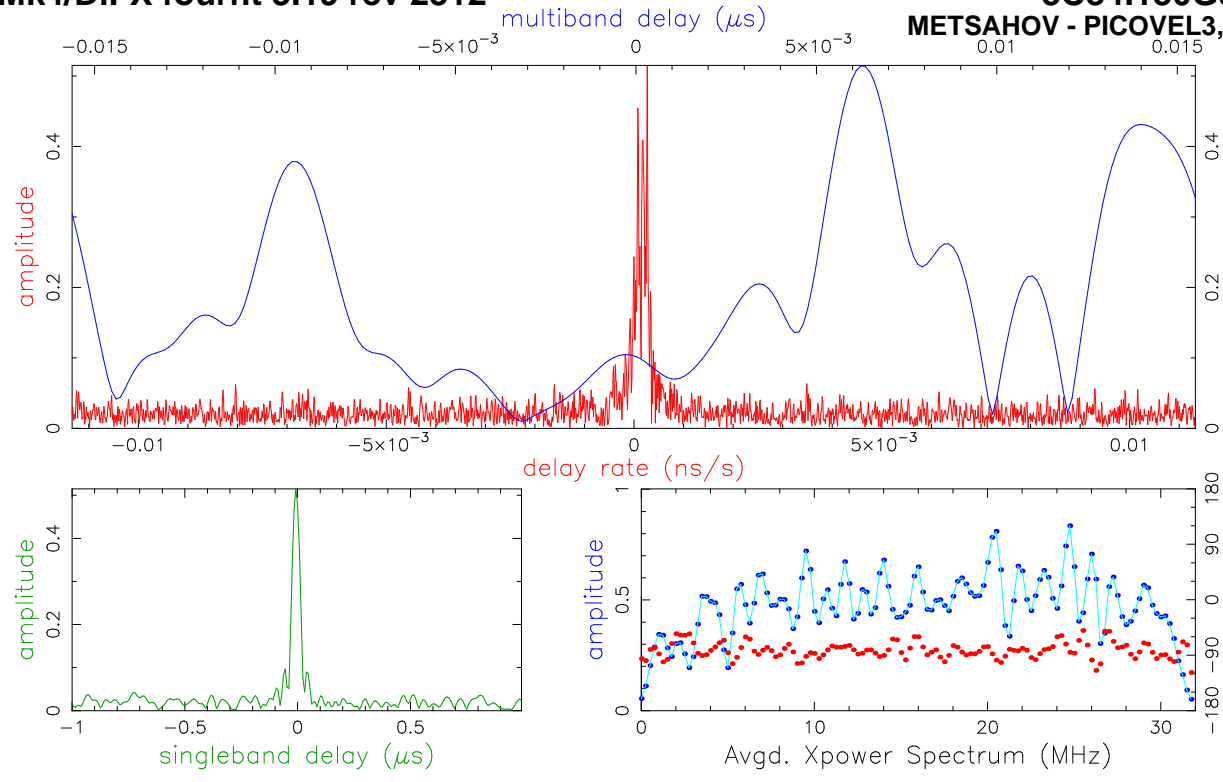
SNR 24.5
Int time 479.482
Amp 0.409
Phase 6.8
PFD 0.0e+00
Delays (us)
SBD 0.000464
MBD 0.011589
Fringe rate (Hz) 0.022937
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112441
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----------------------------|---|----------|------------------|---|----------|-----------------|-------------------|----------|--|----------------------|----------|------------------------------|-------------|----------|-----------------------------|---------------------------|------------|-----|
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Zi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| Zi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| Z | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | |
| Group delay (usec)(sbd) | 6.67941813919E+02 | | | Apriori delay (usec) | | | 6.67930224686E+02 | | | Resid mbdelay (usec) | | | 1.15892E-02 | | | +/- 4.4E-05 | | |
| Sband delay (usec) | 6.67930688686E+02 | | | Apriori clock (usec) | | | 7.1737343E-01 | | | Resid sbdelay (usec) | | | 4.64000E-04 | | | +/- 7.0E-04 | | |
| Phase delay (usec) | 6.67930224905E+02 | | | Apriori clockrate (us/s) | | | 3.6929281E-07 | | | Resid phdelay (usec) | | | 2.19334E-07 | | | +/- 1.5E-07 | | |
| Delay rate (us/s) | 4.42498282250E-01 | | | Apriori rate (us/s) | | | 4.42498015973E-01 | | | Resid rate (us/s) | | | 2.66277E-07 | | | +/- 5.4E-10 | | |
| Total phase (deg) | 206.4 | | | Apriori accel (us/s/s) | | | 1.63185919812E-05 | | | Resid phase (deg) | | | 6.8 | | | +/- 4.7 | | |
| ph/seg (deg) | RMS | Theor. | Amplitude | | | 0.409 +/- 0.017 | | | Pcal mode: MANUAL, MANUAL | | | PC period (AP's) 5, 5 | | | | | | |
| amp/seg (%) | 67.6 | 8.1 | Search (2048X64) | | | 0.395 | | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | sb window (us) | | | -1.000 1.000 | | | |
| ph/frq (deg) | 88.3 | 14.2 | Interp. | | | 0.000 | | | Bits/sample: 2x2 | | | SampCntNorm: enabled | | | mb window (us) -0.016 0.016 | | | |
| amp/frq (%) | 69.3 | 9.4 | Inc. seg. avg. | | | 0.656 | | | Sample rate(MISamp/s): 64 | | | dr window (ns/s) | | | -0.011 0.011 | | | |
| | 118.4 | 16.3 | Inc. frq. avg. | | | 0.856 | | | Data rate(Mb/s): 2048 | | | nlags: 128 t_cohere infinite | | | ion window (TEC) 0.00 0.00 | | | |
| Z: az 317.3 el 22.0 pa 28.8 | i: az 307.4 el 20.3 pa 58.6 | | | u,v (fr/asec) -3363.084 2927.814 | | | | | | | | | | | | simultaneous interpolator | | |
| Control file: cf_1234_gmva | Input file: /Exps/c192b/v2/1234/No0205/Zi..130G9L | | | Output file: /Exps/c192b/v2/1234/No0205/Zi.W.362.130G9L | | | | | | | | | | | | | | |

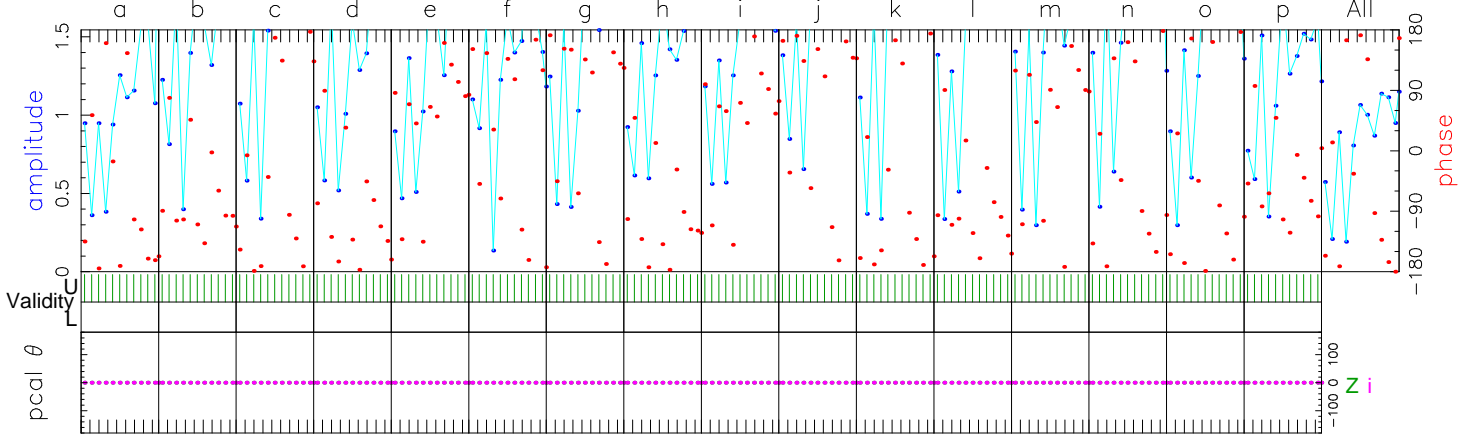


Fringe quality 5

SNR 30.8
 Int time 479.482
 Amp 0.515
 Phase -161.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.007395
 MBD 0.006283
 Fringe rate (Hz) 0.022955
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112446
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

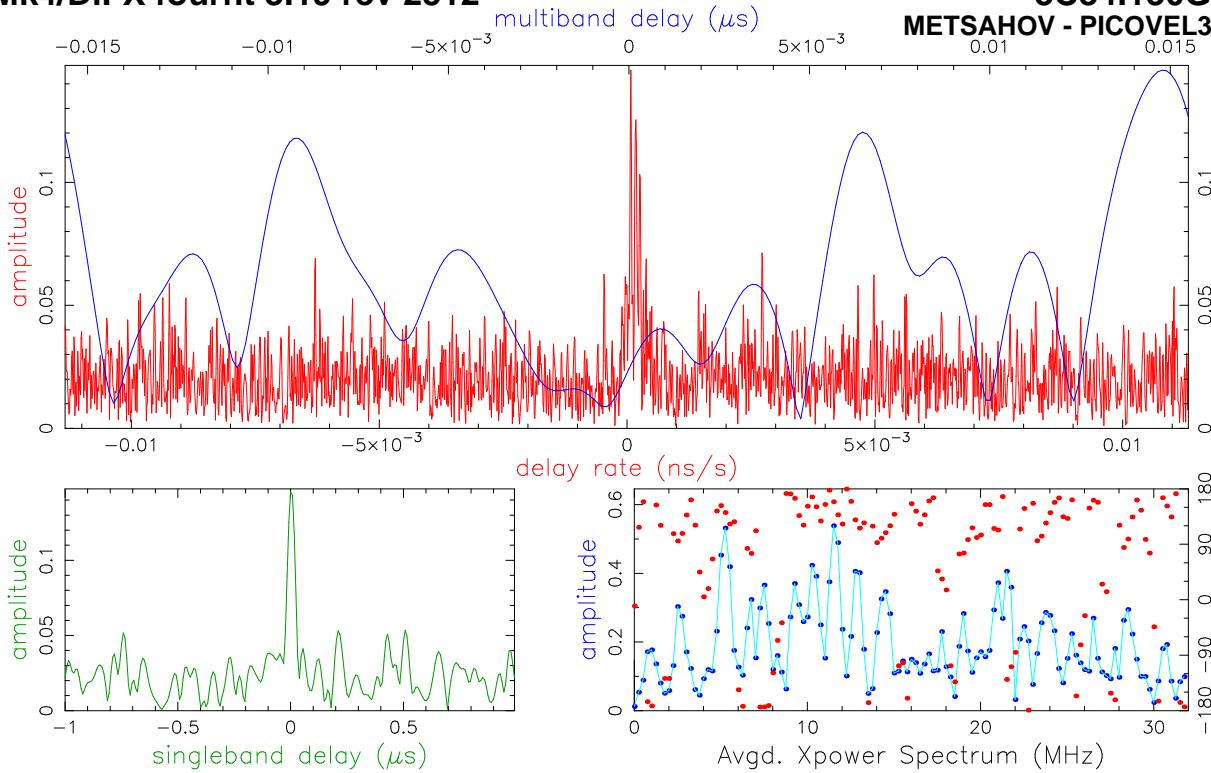


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-------------------------|-------------------|----------|----------|--------------------------|----------|----------|-------------------|----------|----------|----------------------|----------|----------|--------------|----------|----------|----------|------------|--------|
| | -151.6 | -87.4 | -160.9 | -111.8 | 95.0 | 166.9 | 159.8 | -113.0 | 92.2 | 171.2 | -164.2 | -99.9 | 118.5 | -159.6 | -153.0 | -68.2 | Phase | -161.0 |
| | 0.7 | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.9 | 0.8 | 0.8 | 1.0 | 1.0 | 1.1 | 0.9 | 1.0 | 1.0 | 0.8 | Ampl. | 0.9 |
| | 129.6 | 128.1 | 128.9 | 128.9 | 128.5 | 128.4 | 128.9 | 128.6 | 128.6 | 128.7 | 128.4 | 128.6 | 128.7 | 128.8 | 129.0 | 128.7 | Sbd box | 128.1 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Z:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| Z:i | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| Z | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | |
| | | | | | | | | | | | | | | | | | Chan ids | |
| | | | | | | | | | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 6.67936507669E+02 | | | Apriori delay (usec) | | | 6.67930224686E+02 | | | Resid mbdelay (usec) | | | 6.28298E-03 | | | +/- | 3.5E-05 | |
| Sband delay (usec) | 6.67922830186E+02 | | | Apriori clock (usec) | | | 7.1737343E-01 | | | Resid sbdelay (usec) | | | -7.39450E-03 | | | +/- | 5.6E-04 | |
| Phase delay (usec) | 6.67930219495E+02 | | | Apriori clockrate (us/s) | | | 3.6929281E-07 | | | Resid phdelay (usec) | | | -5.19060E-06 | | | +/- | 1.2E-07 | |
| Delay rate (us/s) | 4.42498282459E-01 | | | Apriori rate (us/s) | | | 4.42498015973E-01 | | | Resid rate (us/s) | | | 2.66486E-07 | | | +/- | 4.3E-10 | |
| Total phase (deg) | 38.6 | | | Apriori accel (us/s/s) | | | 1.63185919812E-05 | | | Resid phase (deg) | | | -161.0 | | | +/- | 3.7 | |

ph/seg (deg) RMS Theor. Amplitude 0.515 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.6 6.4 Search (2048X64) 0.502 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 83.6 11.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 62.5 7.4 Inc. seg. avg. 0.797 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 76.3 13.0 Inc. frq. avg. 0.886 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 317.3 el 22.0 pa 28.8 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -3363.084 2927.814 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Zi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Zi.W.380.130G9L

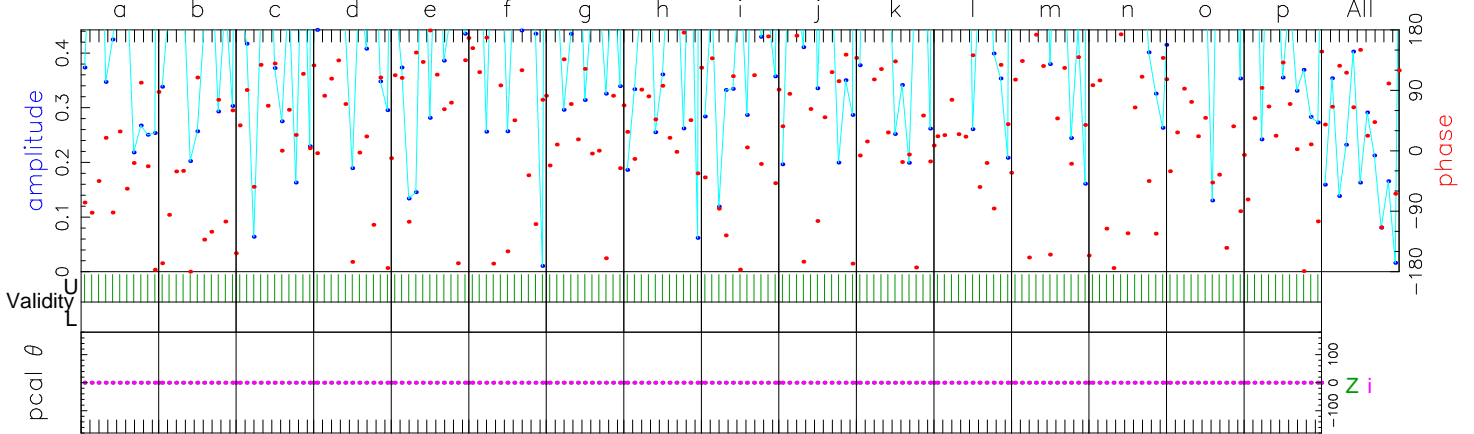


Fringe quality 9

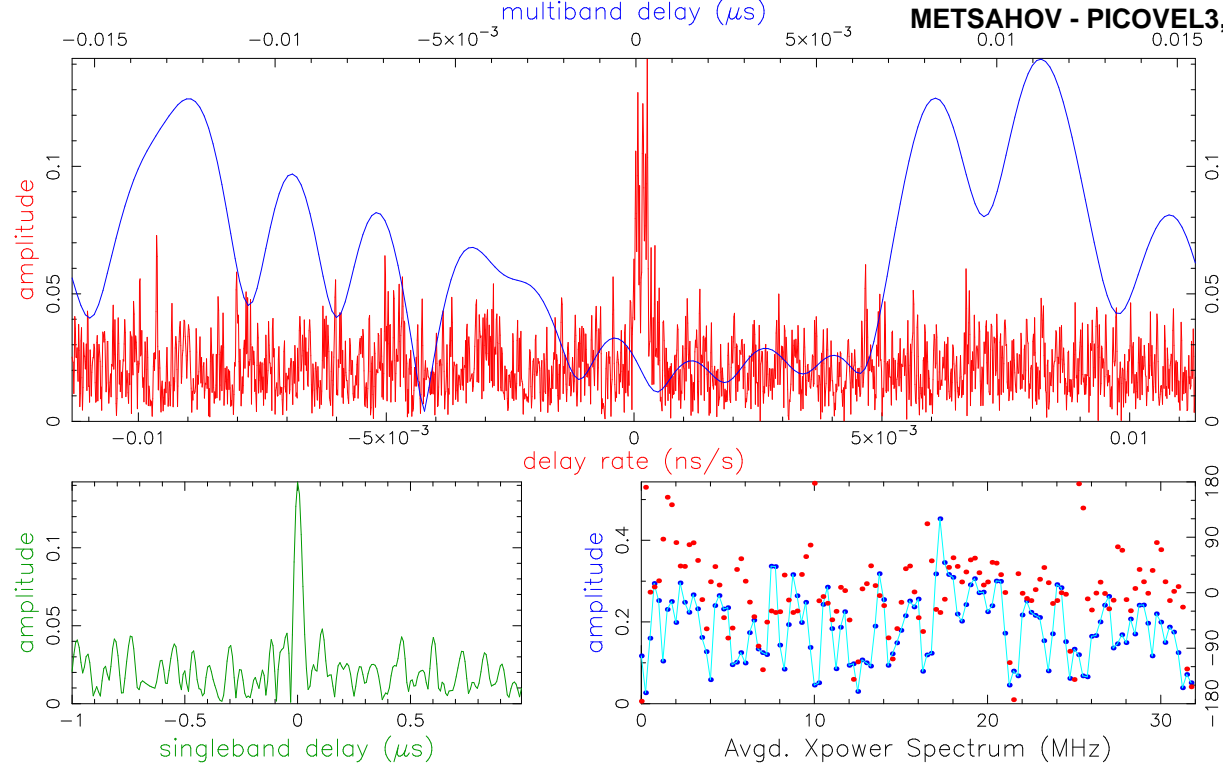
SNR 8.8
Int time 479.482
Amp 0.148
Phase 72.7
PFD 3.9e-10
Delays (us)
SBD 0.003149
MBD 0.014778
Fringe rate (Hz) 0.007037
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112450
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

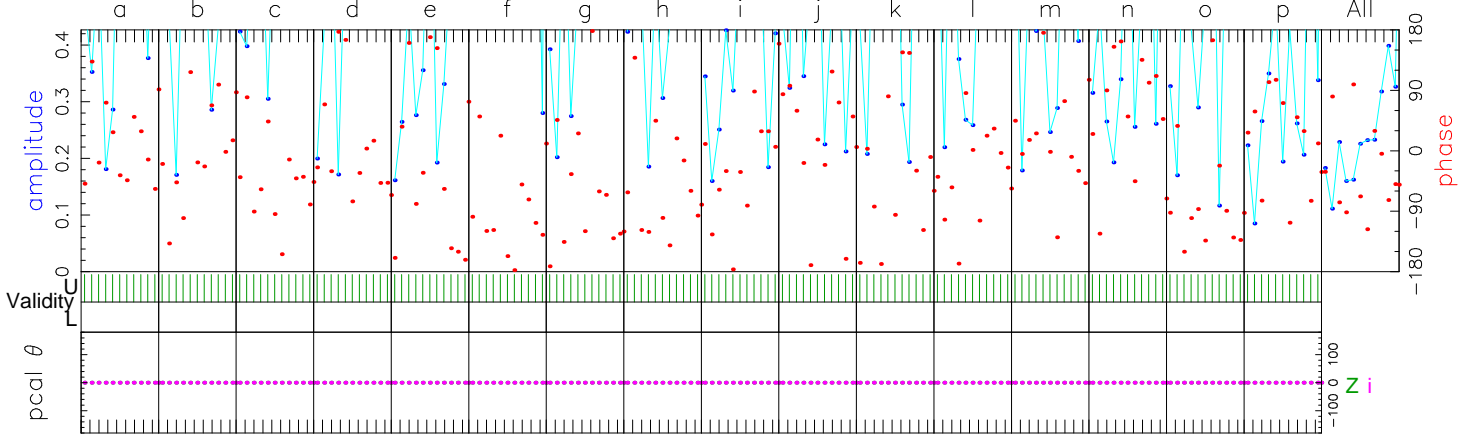


| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----------------------------|---|----------|------------------|---|----------|-----------------|--------------------|----------|--|----------------------|----------|------------------------------|-------------|----------|------------------|---------------------------|--------------|-------|
| | -46.5 | -97.4 | 76.2 | 82.1 | 124.0 | 136.0 | 27.6 | 49.0 | 150.8 | 104.4 | 53.2 | 21.6 | 137.0 | 146.1 | 19.5 | 48.6 | Phase | 72.7 |
| | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | Ampl. | 0.2 |
| | 119.9 | 74.2 | 129.1 | 221.3 | 128.3 | 46.8 | 128.9 | 128.8 | 61.6 | 129.1 | 128.5 | 129.1 | 129.0 | 128.6 | 129.0 | 130.9 | Sbd box | 129.4 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | APs used | |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| Zi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| Zi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| Z | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | Chan ids | |
| i | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | Tracks | |
| | | | | | | | | | | | | | | | | | Chan ids | |
| | | | | | | | | | | | | | | | | | Tracks | |
| Group delay (usec)(sbd) | 6.67945003172E+02 | | | Apriori delay (usec) | | | 6.67930224686E+02 | | | Resid mbdelay (usec) | | | 1.47785E-02 | | | +/- 1.2E-04 | | |
| Sband delay (usec) | 6.67933374186E+02 | | | Apriori clock (usec) | | | 7.1737343E-01 | | | Resid sbdelay (usec) | | | 3.14950E-03 | | | +/- 2.0E-03 | | |
| Phase delay (usec) | 6.67930227030E+02 | | | Apriori clockrate (us/s) | | | 3.6929281E-07 | | | Resid phdelay (usec) | | | 2.34444E-06 | | | +/- 4.2E-07 | | |
| Delay rate (us/s) | 4.42498097663E-01 | | | Apriori rate (us/s) | | | 4.42498015973E-01 | | | Resid rate (us/s) | | | 8.16903E-08 | | | +/- 1.5E-09 | | |
| Total phase (deg) | 272.3 | | | Apriori accel (us/s/s) | | | 1.63185919812E-05 | | | Resid phase (deg) | | | 72.7 | | | +/- 13.0 | | |
| ph/seg (deg) | RMS | Theor. | Amplitude | | | 0.148 +/- 0.017 | | | Pcal mode: MANUAL, MANUAL | | | PC period (AP's) 5, 5 | | | | | | |
| amp/seg (%) | 76.8 | 22.5 | Search (2048X64) | | | 0.141 | | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | sb window (us) | | | -1.000 1.000 | | | |
| ph/frq (deg) | 83.9 | 39.2 | Interp. | | | 0.000 | | | Bits/sample: 2x2 | | | SampCntNorm: enabled | | | mb window (us) | | -0.016 0.016 | |
| amp/frq (%) | 73.4 | 25.9 | Inc. seg. avg. | | | 0.188 | | | Sample rate(MISamp/s): 64 | | | dr window (ns/s) | | | -0.011 0.011 | | | |
| | 94.4 | 45.3 | Inc. frq. avg. | | | 0.237 | | | Data rate(Mb/s): 2048 | | | nlags: 128 t_cohere infinite | | | ion window (TEC) | | 0.00 0.00 | |
| Z: az 317.3 el 22.0 pa 28.8 | i: az 307.4 el 20.3 pa 58.6 | | | u,v (fr/asec) | | | -3363.084 2927.814 | | | | | | | | | simultaneous interpolator | | |
| Control file: cf_1234_gmva | Input file: /Exps/c192b/v2/1234/No0205/Zi..130G9L | | | Output file: /Exps/c192b/v2/1234/No0205/Zi.W.394.130G9L | | | | | | | | | | | | | | |



Fringe quality 9
 SNR 8.5
 Int time 479.482
 Amp 0.142
 Phase -48.7
 PFD 5.9e-09
 Delays (us)
 SBD 0.001194
 MBD 0.011231
 Fringe rate (Hz) 0.022932
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build 2020:080:062909
 2020:086:112454
 2020:014:135814
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



| | 86012.00 | 86044.00 | 86076.00 | 86108.00 | 86140.00 | 86172.00 | 86204.00 | 86236.00 | 86268.00 | 86300.00 | 86332.00 | 86364.00 | 86396.00 | 86428.00 | 86460.00 | 86492.00 | Freq (MHz) | All |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|---------------|
| | -13.7 | -3.8 | -56.0 | -31.0 | -155.9 | -101.5 | -116.1 | -64.6 | -11.6 | 65.4 | -89.8 | -25.8 | 7.7 | 86.2 | -128.2 | -3.9 | | Phase -48.7 |
| | 0.4 | 0.2 | 0.4 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | 0.1 | | Ampl. 0.3 |
| | 129.2 | 128.7 | 129.1 | 128.1 | 128.2 | 129.1 | 129.1 | 129.8 | 3.4 | 128.7 | 2.4 | 128.3 | 172.8 | 129.0 | 129.5 | 92.2 | | Sbd box 129.2 |
| U/L | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | 938/0 | | APs used |
| Z | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC freqs |
| Zi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | PC phase |
| Zi | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 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 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| i | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | PC amp |
| Z | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | W08UR | W09UR | W10UR | W11UR | W12UR | W13UR | W14UR | W15UR | | Chan ids |
| i | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | W08UL | W09UL | W10UL | W11UL | W12UL | W13UL | W14UL | W15UL | | Tracks |

Group delay (usec)(sbd) 6.67941455888E+02 Apriori delay (usec) 6.67930224686E+02 Resid mbdelay (usec) 1.12312E-02 +/- 1.3E-04
 Sband delay (usec) 6.67931418686E+02 Apriori clock (usec) 7.1737343E-01 Resid sbdelay (usec) 1.19400E-03 +/- 2.0E-03
 Phase delay (usec) 6.67930223116E+02 Apriori clockrate (us/s) 3.6929281E-07 Resid phdelay (usec) -1.56935E-06 +/- 4.3E-07
 Delay rate (us/s) 4.42498282194E-01 Apriori rate (us/s) 4.42498015973E-01 Resid rate (us/s) 2.66221E-07 +/- 1.6E-09
 Total phase (deg) 150.9 Apriori accel (us/s/s) 1.63185919812E-05 Resid phase (deg) -48.7 +/- 13.5

ph/seg (deg) RMS Theor. Amplitude 0.142 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.7 23.3 Search (2048X64) 0.140 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 87.5 40.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 110.6 47.0 Inc. seg. avg. 0.217 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.251 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 317.3 el 22.0 pa 28.8 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -3363.084 2927.814 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Zi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Zi.W.405.130G9L