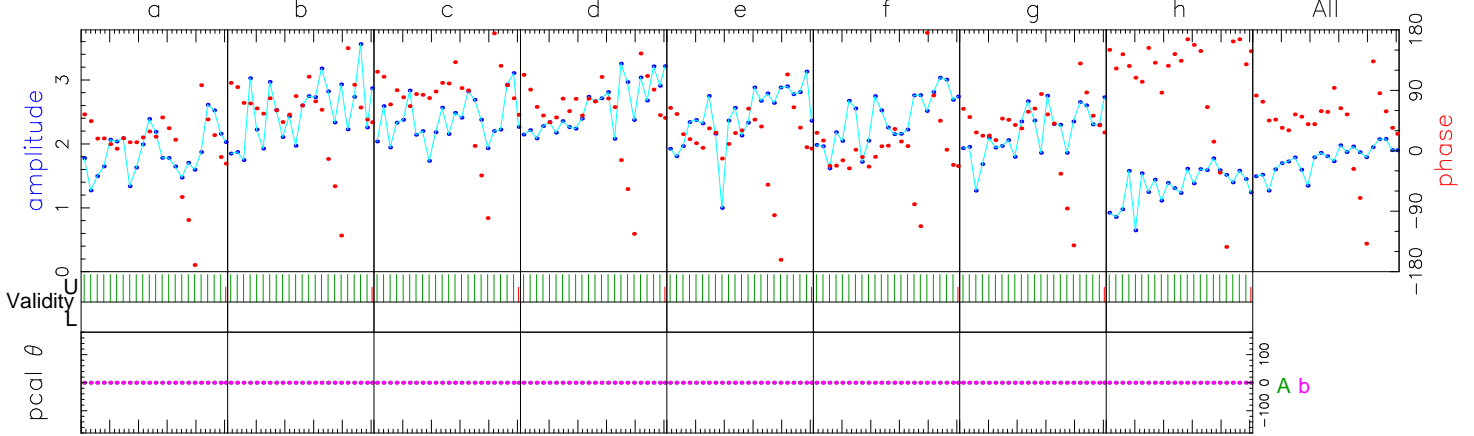


Fringe quality 2

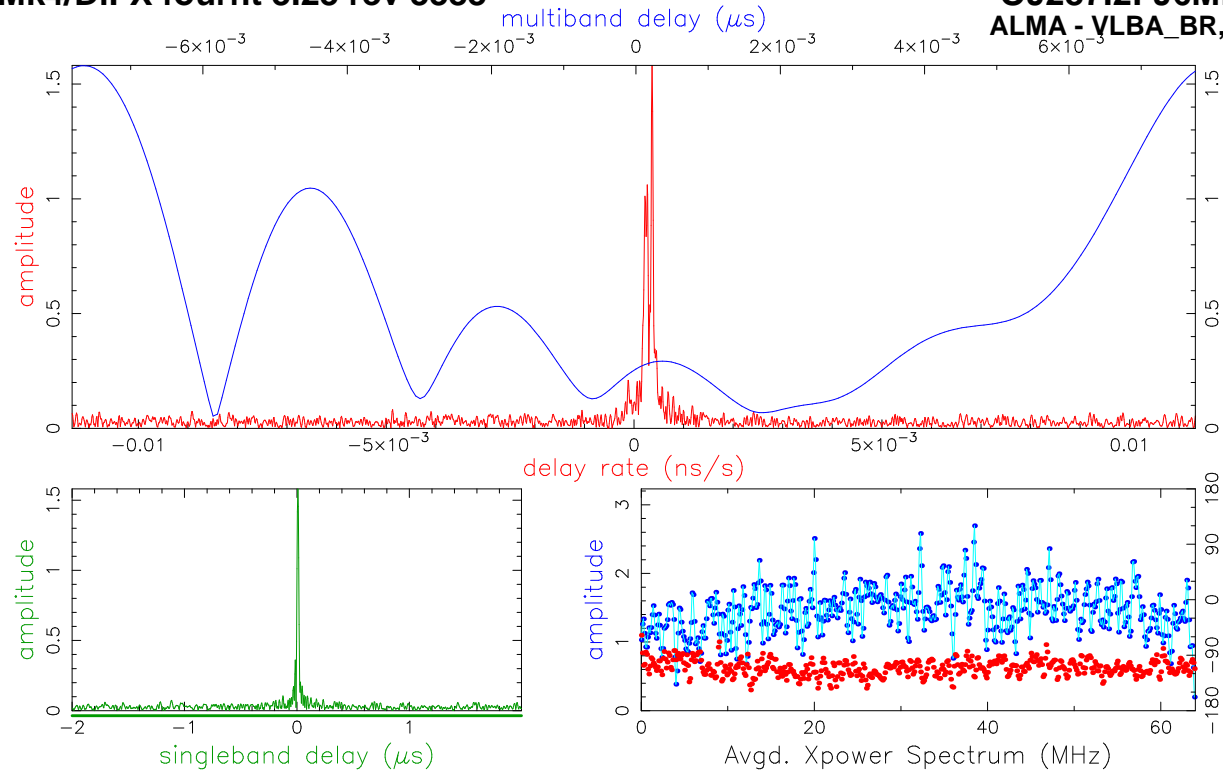
SNR 59.7
Int time 299.937
Amp 1.261
Phase 52.6
PFD 0.0e+00
Delays (us)
SBD 0.007980
MBD -0.007648
Fringe rate (Hz) 0.031199
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080536
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All | |
|---|--------------------|-----------------------------|--------------------------|----------------------------------|--------------------|---|----------------------|------------------------------|--------------|---------------------------|--------------|
| | 20.8 | 68.1 | 89.5 | 71.2 | 28.0 | -3.4 | 46.2 | 133.9 | Phase | 52.6 | |
| | 1.4 | 1.8 | 1.7 | 1.8 | 1.7 | 1.5 | 1.5 | 0.9 | Ampl. | 1.6 | |
| | 516.6 | 514.6 | 514.8 | 515.1 | 514.9 | 515.2 | 515.6 | 517.3 | Sbd box | 515.0 | |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| A:b | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | |
| A:b | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | | |
| | | | | | | | | | Chan ids | | |
| | | | | | | | | | Tracks | | |
| Group delay (usec) (SBD) | -1.21548449576E+04 | | Apriori delay (usec) | | -1.21548529350E+04 | | Resid mbdelay (usec) | | -7.64751E-03 | +/- 1.8E-05 | |
| Sband delay (usec) | -1.21548449548E+04 | | Apriori clock (usec) | | -2.1046179E+03 | | Resid sbdelay (usec) | | 7.98025E-03 | +/- 1.4E-04 | |
| Phase delay (usec) | -1.21548529333E+04 | | Apriori clockrate (us/s) | | -1.1300001E-06 | | Resid phdelay (usec) | | 1.69548E-06 | +/- 6.2E-08 | |
| Delay rate (us/s) | -1.05926288423E+00 | | Apriori rate (us/s) | | -1.05926324642E+00 | | Resid rate (us/s) | | 3.62191E-07 | +/- 3.6E-10 | |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 9.65212808981E-06 | | Resid phase (deg) | | 52.6 | +/- 1.9 | |
| | RMS | Theor. | Amplitude | 1.261 +/- 0.021 | | Pcal mode: MANUAL, MANUAL | | PC period (AP's) 5, 5 | | | |
| ph/seg (deg) | 52.8 | 4.6 | Search (2048X32) | 1.238 | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | | -2.000 2.000 | |
| amp/seg (%) | 43.1 | 8.0 | Interp. | 0.000 | | Bits/sample: 2x2 | | SampCntNorm: enabled | | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 47.2 | 2.7 | Inc. seg. avg. | 1.757 | | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | | -0.011 0.011 | |
| amp/frq (%) | 32.0 | 4.7 | Inc. frq. avg. | 1.558 | | Data rate(Mb/s): 2048 | | nlags: 512 t_cohere infinite | | ion window (TEC) | 0.00 0.00 |
| A: az 307.1 el 24.6 pa 128.6 | | b: az 177.2 el 61.9 pa -2.3 | | u,v (fr/asec) 6480.427 -9172.883 | | | | | | simultaneous interpolator | |
| Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ab..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ab.W.15.2FJ6ME | | | | | | | | | | | |

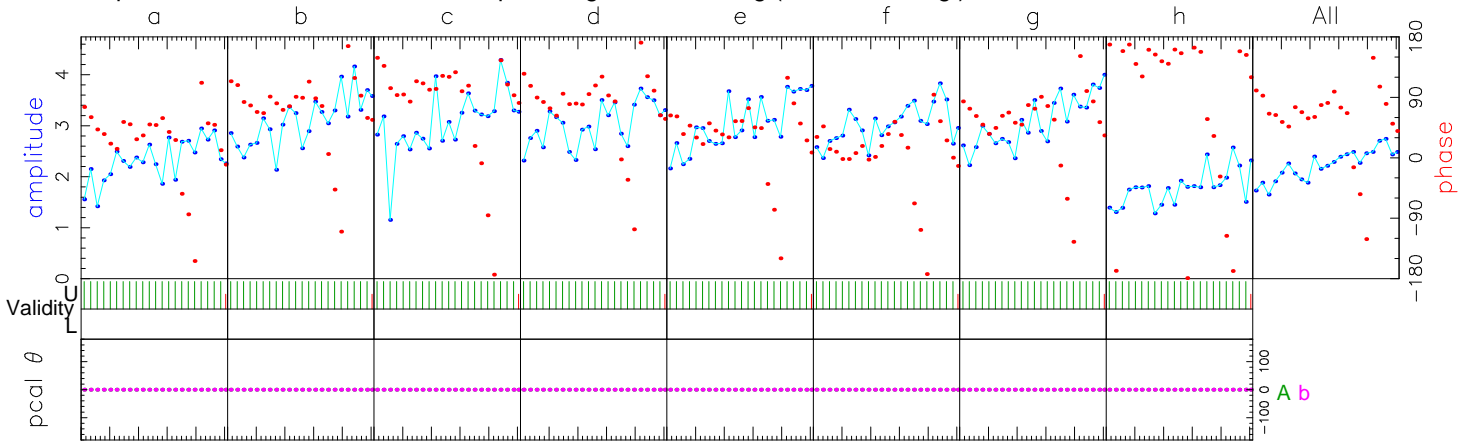


Fringe quality 2

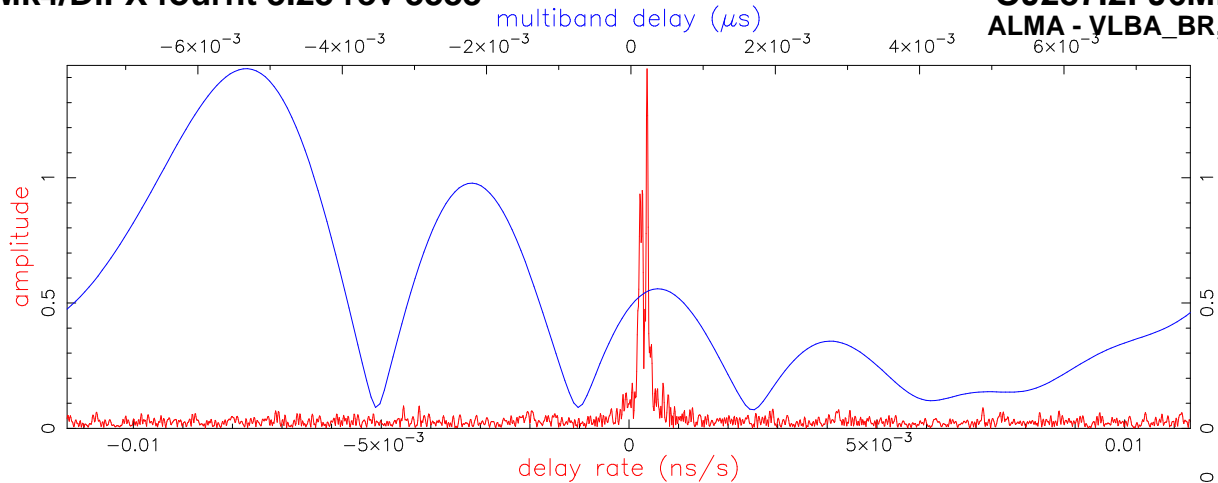
SNR 74.9
Int time 299.937
Amp 1.581
Phase 70.2
PFD 0.0e+00
Delays (us)
SBD 0.008059
MBD -0.007636
Fringe rate (Hz) 0.031241
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080543
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

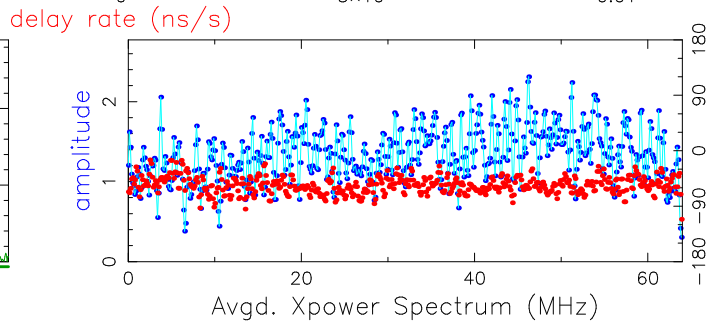
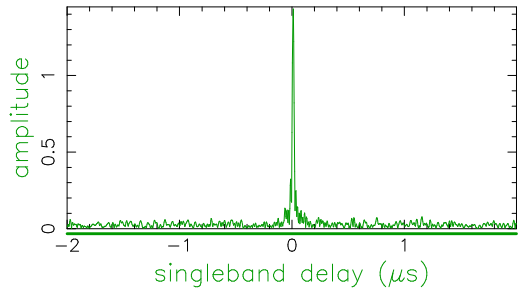


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All | |
|---|--------------------|-----------------------------|--------------------------|----------------------------------|---|----------|------------------------------|---------------------------|------------------|-------------|-------|
| | 37.0 | 84.7 | 109.3 | 90.7 | 44.0 | 16.8 | 62.7 | 154.8 | Phase | 70.2 | |
| | 1.6 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 1.2 | Ampl. | 2.0 | |
| | 516.8 | 514.7 | 514.7 | 515.0 | 514.9 | 515.0 | 515.7 | 517.4 | Sbd box | 515.1 | |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| A:b | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | |
| A:b | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | | |
| b | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | | |
| | | | | | | | | | Tracks | | |
| Group delay (usec) (SBD) | -1.21548449456E+04 | | Apriori delay (usec) | | -1.21548529350E+04 | | Resid mbdelay (usec) | | -7.63560E-03 | +/- 1.4E-05 | |
| Sband delay (usec) | -1.21548448763E+04 | | Apriori clock (usec) | | -2.1046179E+03 | | Resid sbdelay (usec) | | 8.05875E-03 | +/- 1.2E-04 | |
| Phase delay (usec) | -1.21548529328E+04 | | Apriori clockrate (us/s) | | -1.1300001E-06 | | Resid phdelay (usec) | | 2.26396E-06 | +/- 4.9E-08 | |
| Delay rate (us/s) | -1.05926288374E+00 | | Apriori rate (us/s) | | -1.05926324642E+00 | | Resid rate (us/s) | | 3.62681E-07 | +/- 2.8E-10 | |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 9.65212808981E-06 | | Resid phase (deg) | | 70.2 | +/- 1.5 | |
| | RMS | Theor. | Amplitude | 1.581 +/- 0.021 | Pcal mode: MANUAL, MANUAL | | PC period (AP's) 5, 5 | | | | |
| ph/seg (deg) | 52.9 | 3.7 | Search (2048X32) | 1.557 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | | -2.000 | 2.000 | |
| amp/seg (%) | 45.0 | 6.4 | Interp. | 0.000 | Bits/sample: 2x2 | | SampCntNorm: enabled | | mb window (us) | -0.008 | 0.008 |
| ph/frq (deg) | 48.3 | 2.2 | Inc. seg. avg. | 2.226 | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | | -0.011 | 0.011 | |
| amp/frq (%) | 33.1 | 3.8 | Inc. frq. avg. | 1.975 | Data rate(Mb/s): 2048 | | nlags: 512 t_cohere infinite | | ion window (TEC) | 0.00 | 0.00 |
| A: az 307.1 el 24.6 pa 128.6 | | b: az 177.2 el 61.9 pa -2.3 | | u,v (fr/asec) 6480.427 -9172.883 | | | | simultaneous interpolator | | | |
| Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ab..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ab.W.24.2FJ6ME | | | | | | | | | | | |



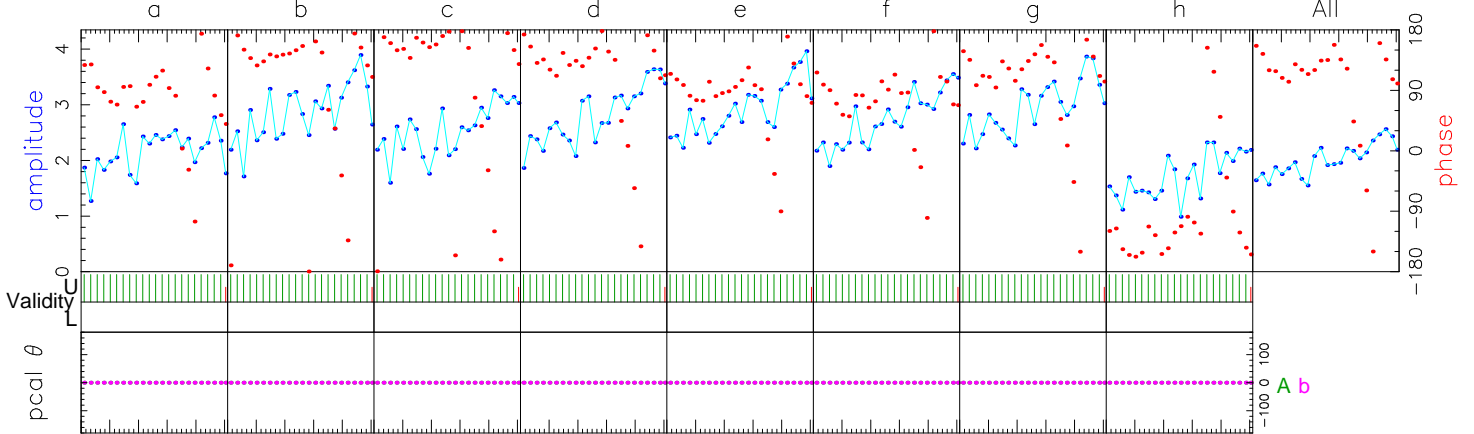
Fringe quality 2

SNR 68.6
Int time 299.937
Amp 1.449
Phase 126.0
PFD 0.0e+00
Delays (us)
SBD 0.010494
MBD -0.005386
Fringe rate (Hz)
0.031210
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080550
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



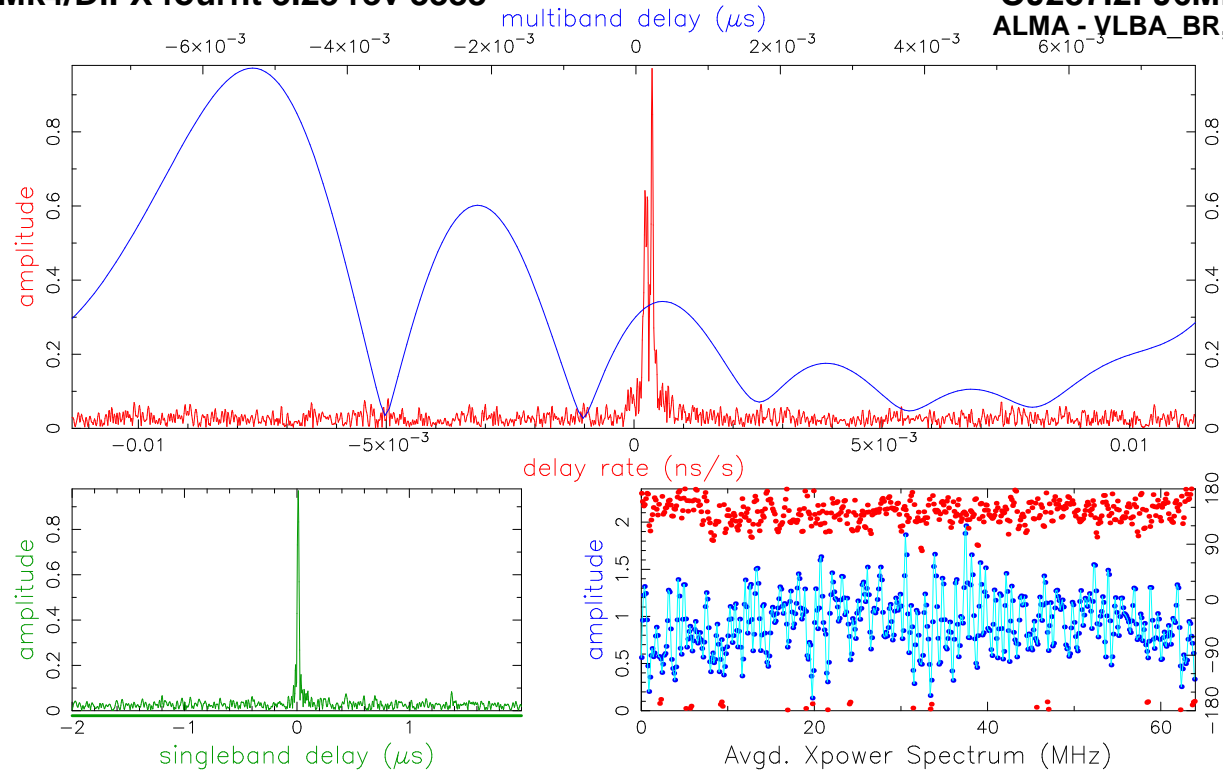
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-------|
| 88.2 | 147.8 | 163.7 | 137.6 | 94.5 | 81.9 | 126.0 | -133.4 | 1.2 | Phase | 126.0 |
| 1.5 | 2.1 | 1.8 | 1.9 | 2.1 | 1.9 | 2.1 | 1.2 | 1.2 | Ampl. | 1.8 |
| 517.5 | 515.6 | 515.3 | 515.6 | 515.7 | 515.7 | 516.1 | 518.5 | 518.5 | Sbd box | 515.7 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:b | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:b | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |

| | | | | | | | |
|--------------------------|--------------------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| Group delay (usec) (SBD) | -1.21548426961E+04 | Apriori delay (usec) | -1.21548529350E+04 | Resid mbdelay (usec) | -5.38610E-03 | +/- | 1.6E-05 |
| Sband delay (usec) | -1.21548424415E+04 | Apriori clock (usec) | -2.1046179E+03 | Resid sbdelay (usec) | 1.04935E-02 | +/- | 1.3E-04 |
| Phase delay (usec) | -1.21548529310E+04 | Apriori clockrate (us/s) | -1.1300001E-06 | Resid phdelay (usec) | 4.06290E-06 | +/- | 5.4E-08 |
| Delay rate (us/s) | -1.05926288411E+00 | Apriori rate (us/s) | -1.05926324642E+00 | Resid rate (us/s) | 3.62317E-07 | +/- | 3.1E-10 |
| Total phase (deg) | -170.8 | Apriori accel (us/s/s) | 9.65212808981E-06 | Resid phase (deg) | 126.0 | +/- | 1.7 |

| | | | | | | | | | |
|--------------|------|------------------|-------|----------------------|-----------------------------|------------------------------|------------------|------------------|-------|
| ph/seg (deg) | 53.4 | Theor. | 4.0 | Amplitude | 1.449 +/- 0.021 | Pcal mode: | MANUAL, MANUAL | PC period (AP's) | 5, 5 |
| amp/seg (%) | 43.5 | Search (2048X32) | 1.416 | Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | sb window (us) | -2.000 | 2.000 | |
| ph/frq (deg) | 52.5 | Inc. seg. avg. | 2.007 | Bits/sample: | 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 | 0.008 |
| amp/frq (%) | 33.7 | Inc. frq. avg. | 1.822 | Data rate (MSamp/s): | 128 MBpts 32 Amb 0.016 us | dr window (ns/s) | -0.011 | 0.011 | |
| | | | | Data rate (Mb/s): | 2048 | nlags: 512 t_cohere infinite | ion window (TEC) | 0.00 | 0.00 |

A: az 307.1 el 24.6 pa 128.6 b: az 177.2 el 61.9 pa -2.3 u,v (fr/asec) 6480.427 -9172.883 simultaneous interpolator

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ab..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ab.W.29.2FJ6ME

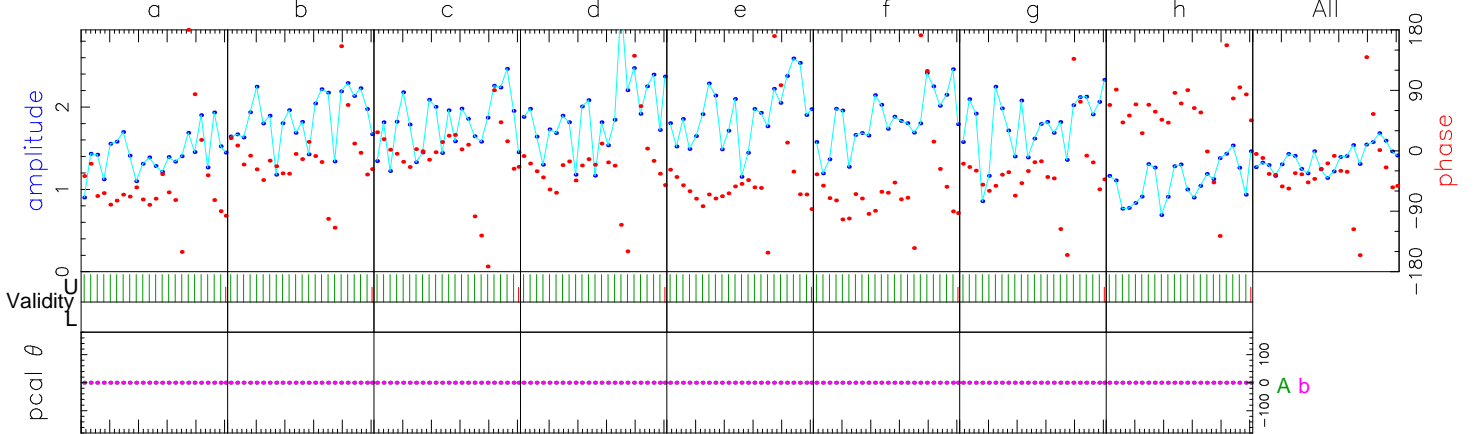


Fringe quality 4

SNR 46.4
Int time 299.937
Amp 0.979
Phase -32.9
PFD 0.0e+00
Delays (us)
SBD 0.010567
MBD -0.005375
Fringe rate (Hz) 0.031151
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

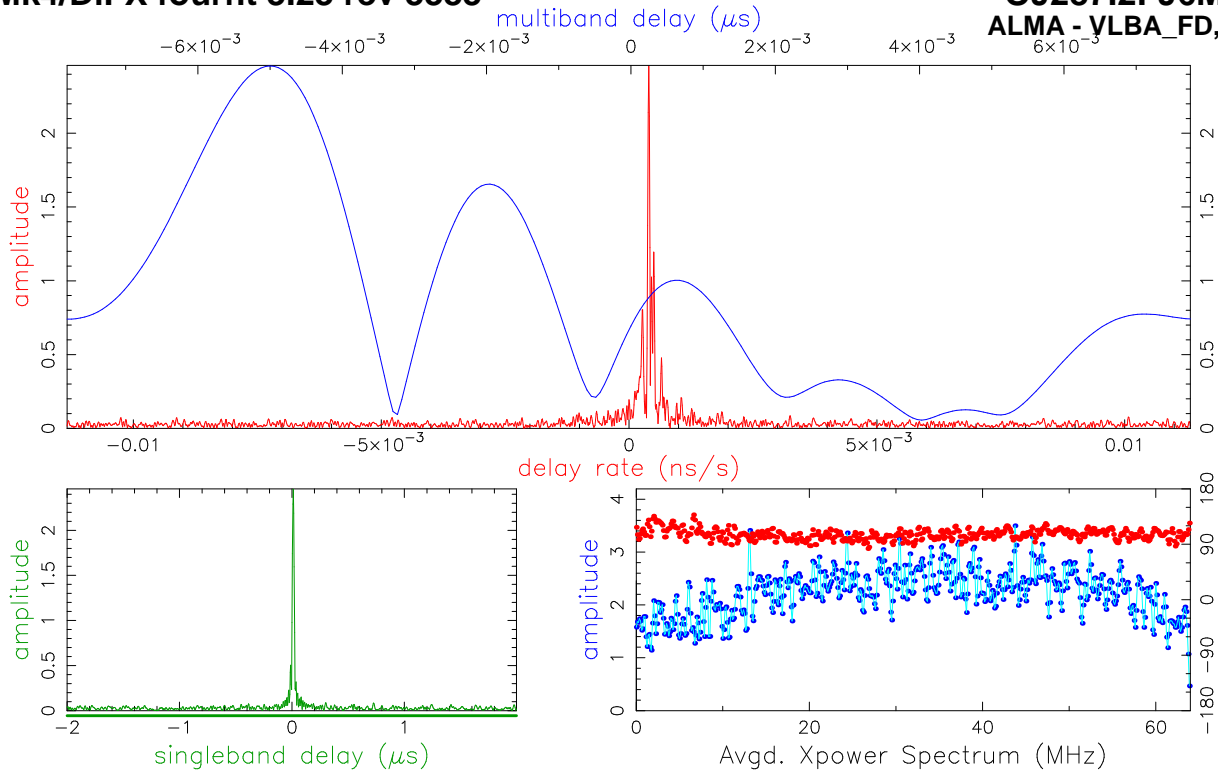
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080530
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -65.8 | -15.3 | 2.6 | -28.2 | -58.1 | -72.4 | -36.3 | 66.2 | Phase | -32.9 |
| | 1.0 | 1.4 | 1.3 | 1.2 | 1.4 | 1.3 | 1.3 | 0.8 | Ampl. | 1.2 |
| | 517.5 | 515.7 | 515.3 | 515.4 | 515.7 | 515.9 | 516.1 | 518.6 | Sbd box | 515.7 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:b | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:b | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| b | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| b | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.21548426853E+04 | | Apriori delay (usec) | | -1.21548529350E+04 | | Resid mbdelay (usec) | | -5.37523E-03 | +/- 2.3E-05 |
| Sband delay (usec) | -1.21548423685E+04 | | Apriori clock (usec) | | -2.1046179E+03 | | Resid sbdelay (usec) | | 1.05665E-02 | +/- 1.9E-04 |
| Phase delay (usec) | -1.21548529361E+04 | | Apriori clockrate (us/s) | | -1.1300001E-06 | | Resid phdelay (usec) | | -1.06191E-06 | +/- 8.0E-08 |
| Delay rate (us/s) | -1.05926288479E+00 | | Apriori rate (us/s) | | -1.05926324642E+00 | | Resid rate (us/s) | | 3.61631E-07 | +/- 4.6E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 9.65212808981E-06 | | Resid phase (deg) | | -32.9 | +/- 2.5 |

ph/seg (deg) 53.6 5.9 Search (2048X32) 0.954 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.0 10.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 49.5 3.5 Inc. seg. avg. 1.367 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.2 6.1 Inc. frq. avg. 1.192 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 b: az 177.2 el 61.9 pa -2.3 u,v (fr/asec) 6480.427 -9172.883 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ab..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ab.W.9.2FJ6ME

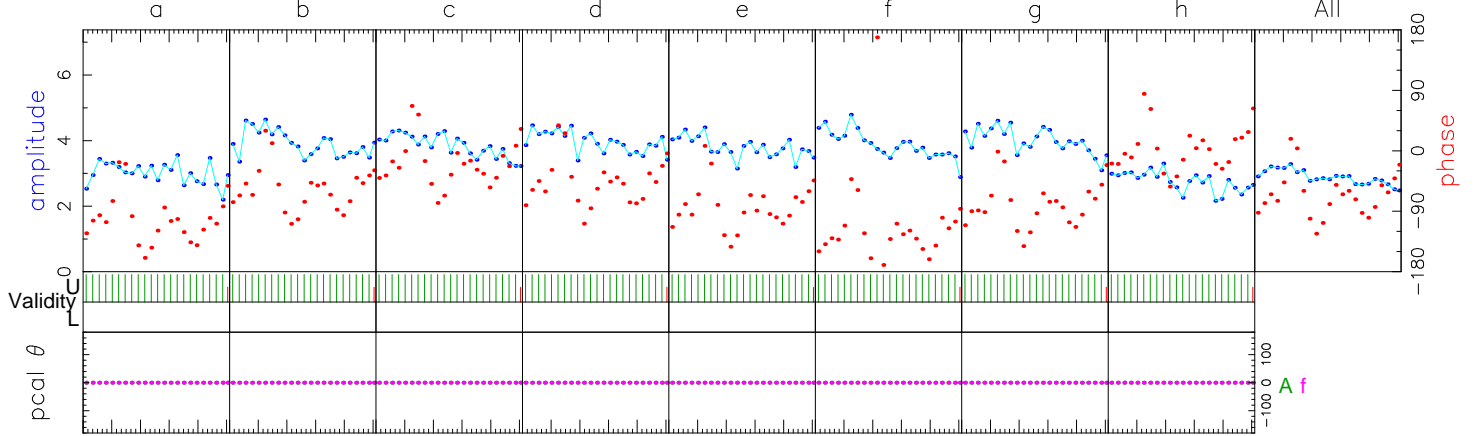


Fringe quality 4

SNR 116.5
Int time 299.973
Amp 2.460
Phase -67.1
PFD 0.0e+00
Delays (us)
SBD 0.011240
MBD -0.005021
Fringe rate (Hz) 0.034392
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080531
2022:122:205858
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -104.7 | -57.3 | -21.7 | -48.4 | -84.1 | -126.1 | -81.5 | 1.2 | Phase | -67.1 |
| | 2.5 | 3.3 | 3.3 | 3.4 | 3.2 | 3.3 | 3.4 | 2.4 | Ampl. | 3.1 |
| | 517.4 | 515.9 | 515.4 | 515.5 | 515.7 | 515.7 | 516.2 | 517.8 | Sbd box | 515.9 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37283871369E+04 | | Apriori delay (usec) | | -1.37283977412E+04 | | Resid mbdelay (usec) | | -5.02072E-03 | +/- 9.3E-06 |
| Sband delay (usec) | -1.37283865012E+04 | | Apriori clock (usec) | | -2.1178708E+03 | | Resid sbdelay (usec) | | 1.12400E-02 | +/- 7.4E-05 |
| Phase delay (usec) | -1.37283977434E+04 | | Apriori clockrate (us/s) | | -1.3800001E-06 | | Resid phdelay (usec) | | -2.16354E-06 | +/- 3.2E-08 |
| Delay rate (us/s) | -7.21830320976E-01 | | Apriori rate (us/s) | | -7.21830720238E-01 | | Resid rate (us/s) | | 3.99262E-07 | +/- 1.8E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.70298982158E-05 | | Resid phase (deg) | | -67.1 | +/- 1.0 |

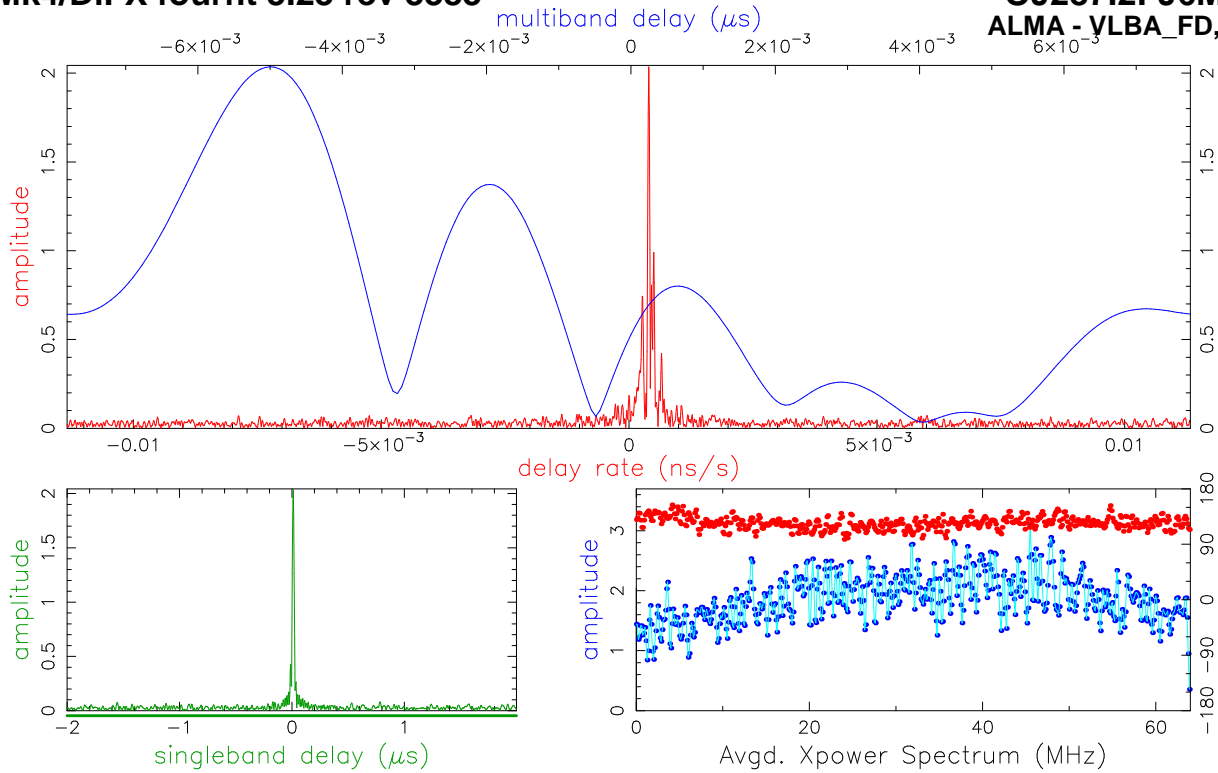
ph/seg (deg) 32.6 2.4 Search (2048X32) 2.415 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 19.5 4.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
ph/frq (deg) 45.8 1.4 Inc. seg. avg. 2.889 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 29.9 2.4 Inc. frq. avg. 3.086 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 307.1 el 24.6 pa 128.6 f: az 234.0 el 73.3 pa 48.4 u, v (fr/asec) 4435.491 -6714.257 simultaneous interpolator

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Af..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Af.W.10.2FJ6ME

Mk4/DiFX fourfit 3.23 rev 3383

OJ287.2FJ6ME, No0022, Af
ALMA - VLBA_FD, fgroup W, pol XR

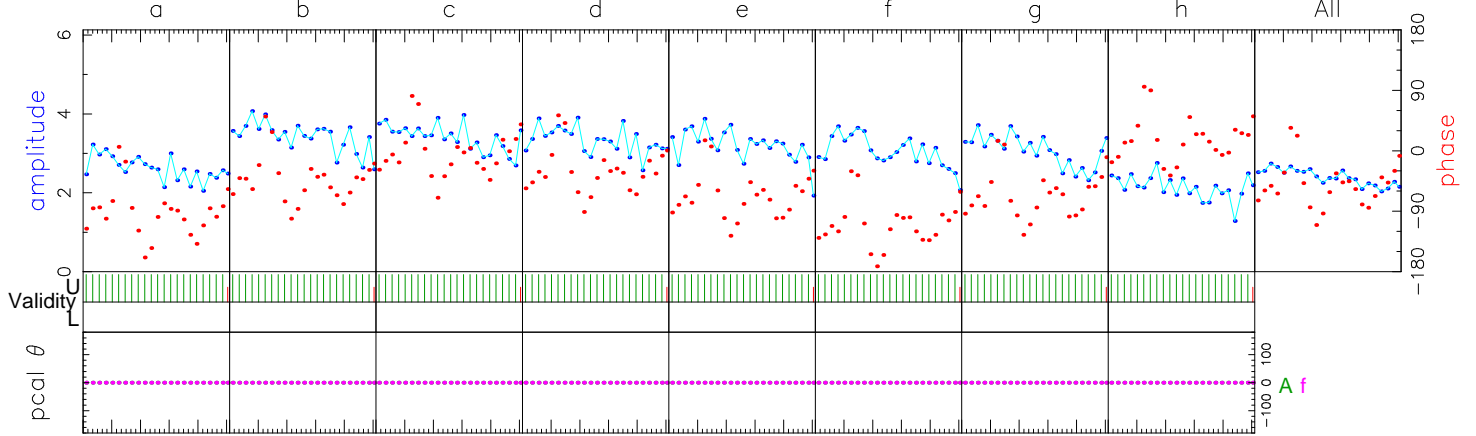


Fringe quality 3

SNR 96.7
Int time 299.973
Amp 2.044
Phase -52.5
PFD 0.0e+00
Delays (us)
SBD 0.010904
MBD -0.005036
Fringe rate (Hz) 0.034411
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080537
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

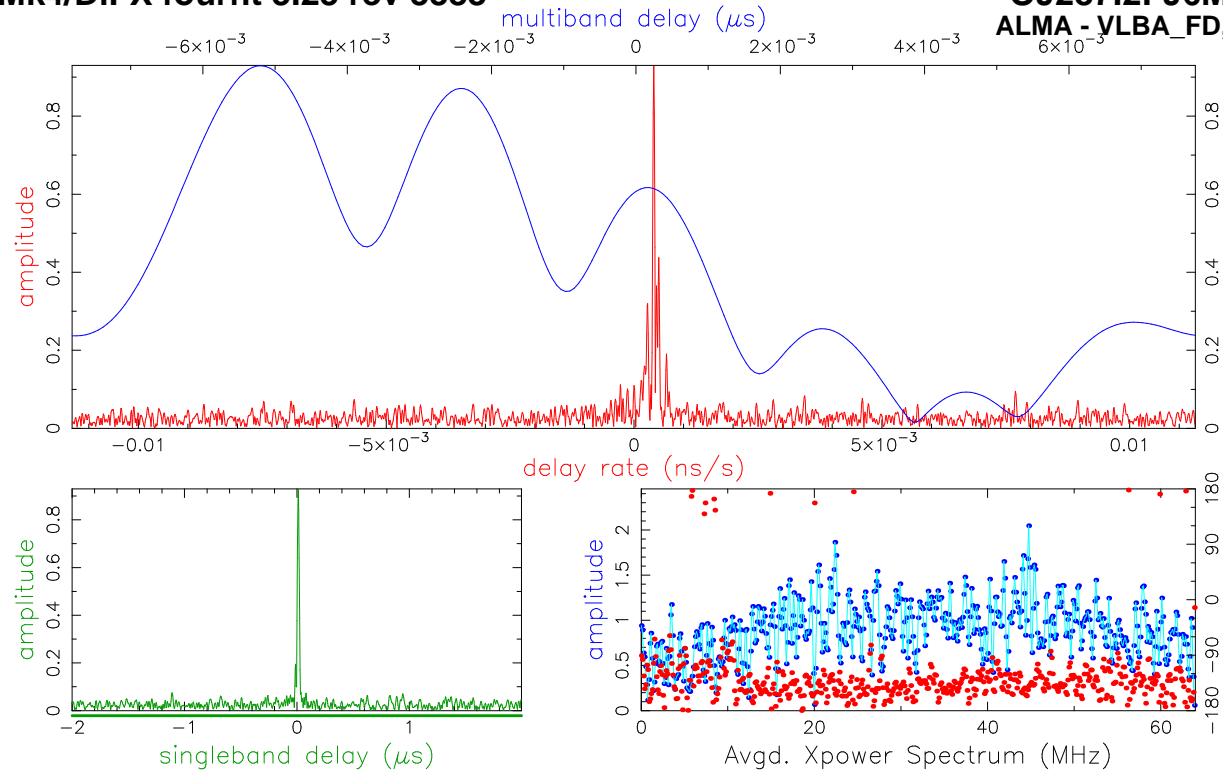


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -95.0 | -45.2 | -6.8 | -31.7 | -69.1 | -110.7 | -67.5 | 15.0 | Phase | -52.5 |
| | 2.2 | 2.9 | 2.9 | 2.8 | 2.7 | 2.6 | 2.6 | 1.8 | Ampl. | 2.6 |
| | 517.3 | 515.9 | 515.5 | 515.4 | 515.7 | 515.6 | 516.0 | 517.8 | Sbd box | 515.8 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| f | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37283871523E+04 | | Apriori delay (usec) | | -1.37283977412E+04 | | Resid mbdelay (usec) | | -5.03610E-03 | +/- 1.1E-05 |
| Sband delay (usec) | -1.37283868377E+04 | | Apriori clock (usec) | | -2.1178708E+03 | | Resid sbdelay (usec) | | 1.09035E-02 | +/- 8.9E-05 |
| Phase delay (usec) | -1.37283977429E+04 | | Apriori clockrate (us/s) | | -1.3800001E-06 | | Resid phdelay (usec) | | -1.69334E-06 | +/- 3.8E-08 |
| Delay rate (us/s) | -7.21830320758E-01 | | Apriori rate (us/s) | | -7.21830720238E-01 | | Resid rate (us/s) | | 3.99481E-07 | +/- 2.2E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.70298982158E-05 | | Resid phase (deg) | | -52.5 | +/- 1.2 |

ph/seg (deg) 33.0 2.8 Search (2048X32) 2.003 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 20.1 5.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 46.2 1.7 Inc. seg. avg. 2.401 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.7 2.9 Inc. frq. avg. 2.560 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 f: az 234.0 el 73.3 pa 48.4 u, v (fr/asec) 4435.491 -6714.257 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Af..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Af.W.17.2FJ6ME

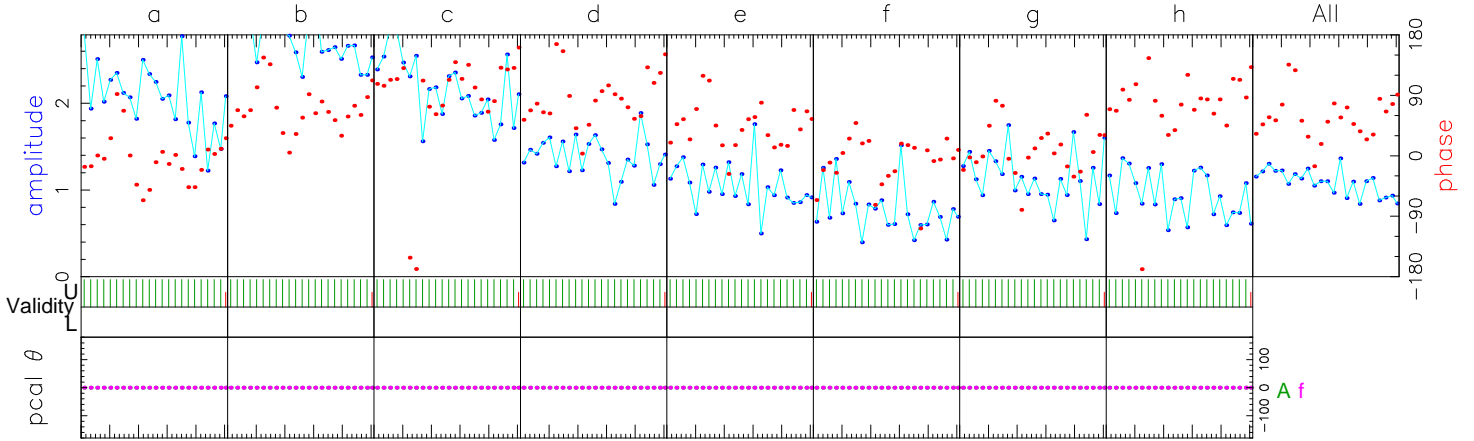
Mk4/DiFX fourfit 3.23 rev 3383

OJ287.2FJ6ME, No0022, Af
ALMA - VLBA_FD, fgroup W, pol YL



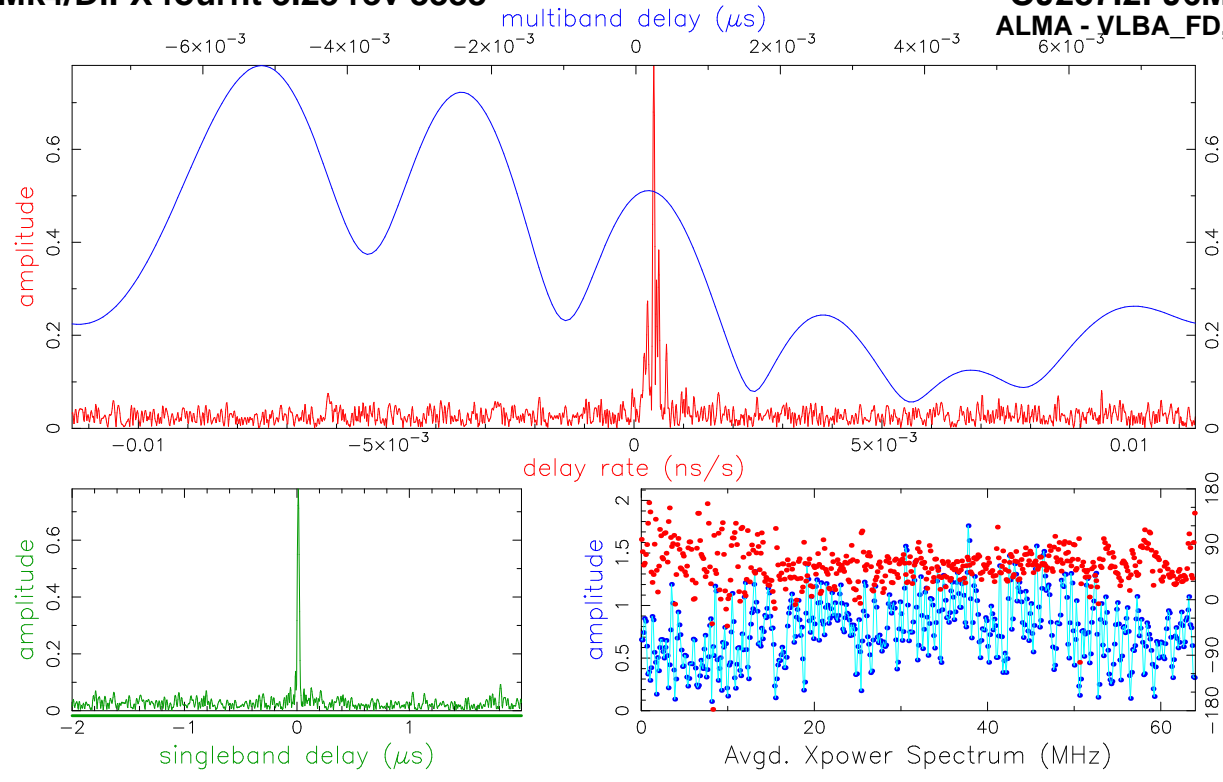
Fringe quality 4
SNR 44.0
Int time 299.973
Amp 0.930
Phase 55.4
PFD 0.0e+00
Delays (us)
SBD 0.011425
MBD -0.005215
Fringe rate (Hz) 0.034321
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080543
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -7.5 | 68.0 | 115.1 | 82.8 | 42.7 | -6.8 | 6.4 | 86.4 | Phase | 55.4 |
| | 1.7 | 2.3 | 1.8 | 1.1 | 0.9 | 0.7 | 0.9 | 0.8 | Ampl. | 1.3 |
| | 517.5 | 516.0 | 515.5 | 515.3 | 515.6 | 515.2 | 515.9 | 517.3 | Sbd box | 515.9 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37283873314E+04 | | Apriori delay (usec) | | -1.37283977412E+04 | | Resid mbdelay (usec) | | -5.21522E-03 | +/- 2.5E-05 |
| Sband delay (usec) | -1.37283863162E+04 | | Apriori clock (usec) | | -2.1178708E+03 | | Resid sbdelay (usec) | | 1.14250E-02 | +/- 2.0E-04 |
| Phase delay (usec) | -1.37283977394E+04 | | Apriori clockrate (us/s) | | -1.3800001E-06 | | Resid phdelay (usec) | | 1.78650E-06 | +/- 8.4E-08 |
| Delay rate (us/s) | -7.21830321811E-01 | | Apriori rate (us/s) | | -7.21830720238E-01 | | Resid rate (us/s) | | 3.98428E-07 | +/- 4.8E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.70298982158E-05 | | Resid phase (deg) | | 55.4 | +/- 2.6 |

ph/seg (deg) 33.1 6.2 Search (2048X32) 0.921 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 23.3 10.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
ph/frq (deg) 51.3 3.7 Inc. seg. avg. 1.086 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 70.5 6.4 Inc. frq. avg. 1.278 Data rate(Mb/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
A: az 307.1 el 24.6 pa 128.6 f: az 234.0 el 73.3 pa 48.4 u, v (fr/asec) 4435.491 -6714.257 simultaneous interpolator
Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Af..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Af.W.22.2FJ6ME

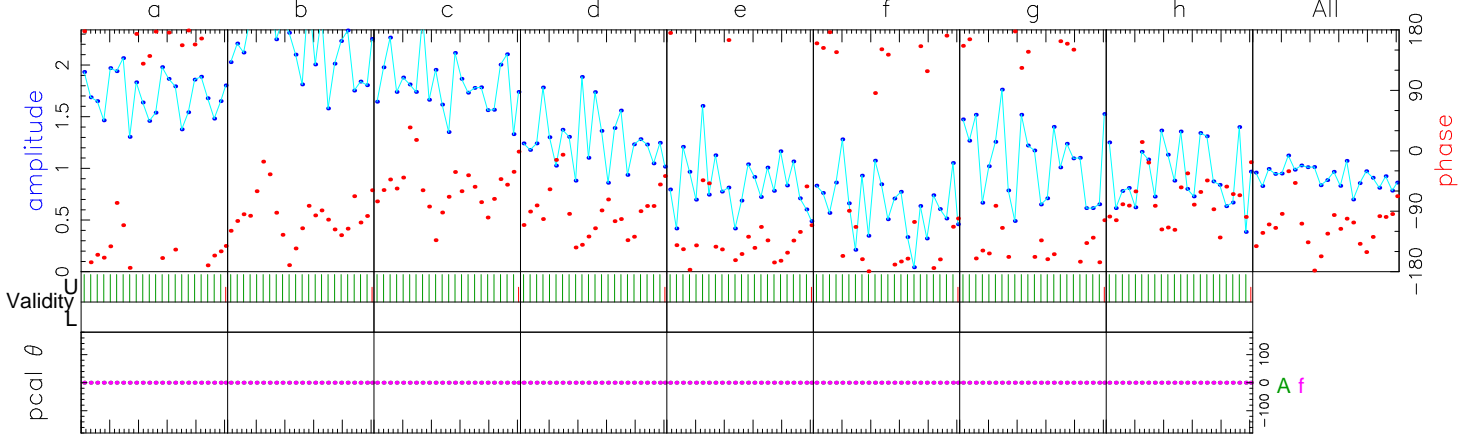


Fringe quality 4

SNR 36.9
Int time 299.973
Amp 0.780
Phase -112.5
PFD 0.0e+00
Delays (us)
SBD 0.011537
MBD -0.005195
Fringe rate (Hz) 0.034336
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080526
2022:122:205858
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

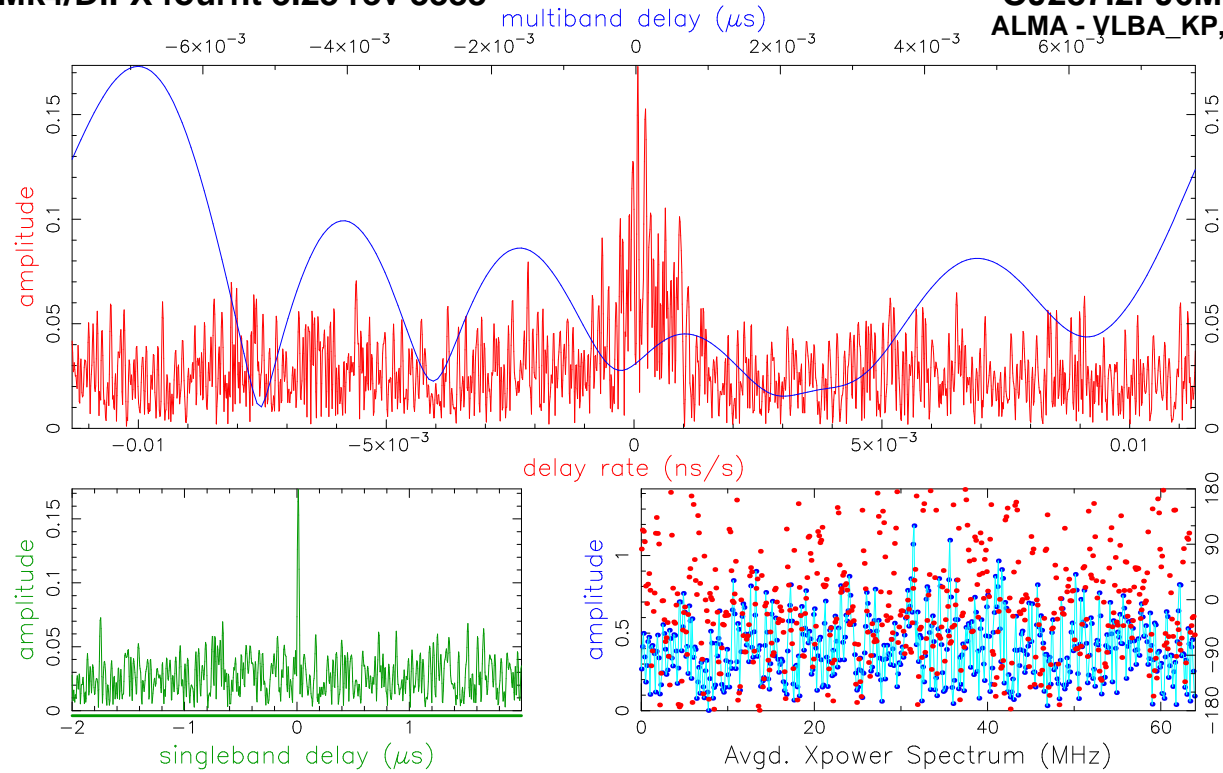


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -168.5 | -97.2 | -54.1 | -93.4 | -137.7 | -179.6 | -167.0 | -72.0 | Phase | -112.5 |
| | 1.4 | 1.8 | 1.5 | 1.1 | 0.7 | 0.5 | 0.8 | 0.8 | Ampl. | 1.1 |
| | 517.5 | 516.0 | 515.5 | 515.6 | 515.2 | 515.5 | 516.2 | 517.4 | Sbd box | 516.0 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:f | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| f | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| f | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37283873114E+04 | | Apriori delay (usec) | | -1.37283977412E+04 | | Resid mbdelay (usec) | | -5.19519E-03 | +/- 2.9E-05 |
| Sband delay (usec) | -1.37283862047E+04 | | Apriori clock (usec) | | -2.1178708E+03 | | Resid sbdelay (usec) | | 1.15365E-02 | +/- 2.3E-04 |
| Phase delay (usec) | -1.37283977448E+04 | | Apriori clockrate (us/s) | | -1.3800001E-06 | | Resid phdelay (usec) | | -3.62659E-06 | +/- 1.0E-07 |
| Delay rate (us/s) | -7.21830321637E-01 | | Apriori rate (us/s) | | -7.21830720238E-01 | | Resid rate (us/s) | | 3.98601E-07 | +/- 5.8E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.70298982158E-05 | | Resid phase (deg) | | -112.5 | +/- 3.1 |

ph/seg (deg) 32.6 7.4 Search (2048X32) 0.772 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 22.6 13.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 53.1 4.4 Inc. seg. avg. 0.919 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 68.2 7.7 Inc. frq. avg. 1.075 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

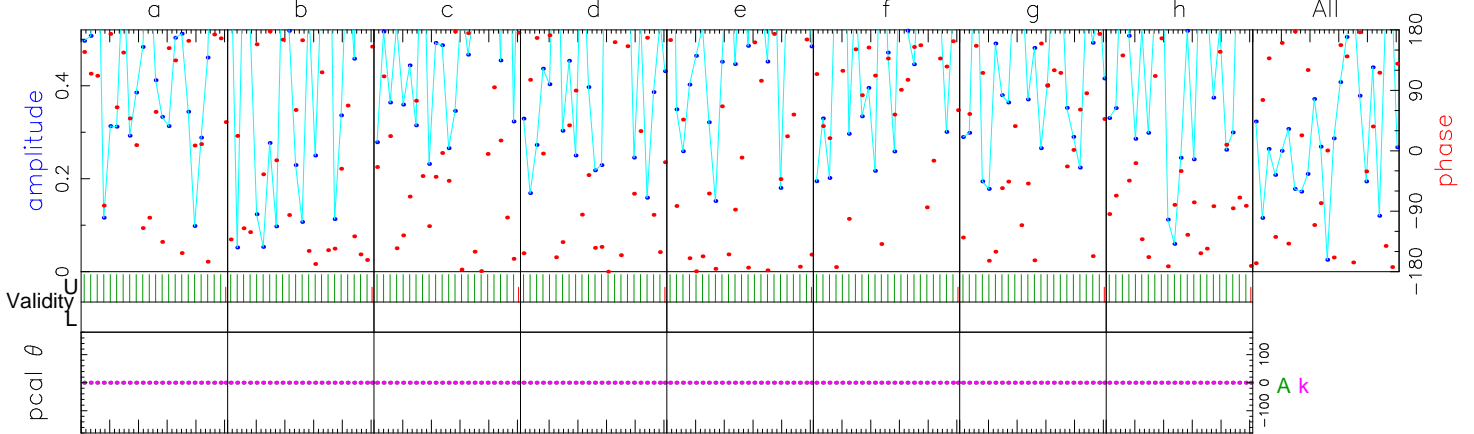
A: az 307.1 el 24.6 pa 128.6 f: az 234.0 el 73.3 pa 48.4 u, v (fr/asec) 4435.491 -6714.257 simultaneous interpolator

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Af..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Af.W.3.2FJ6ME



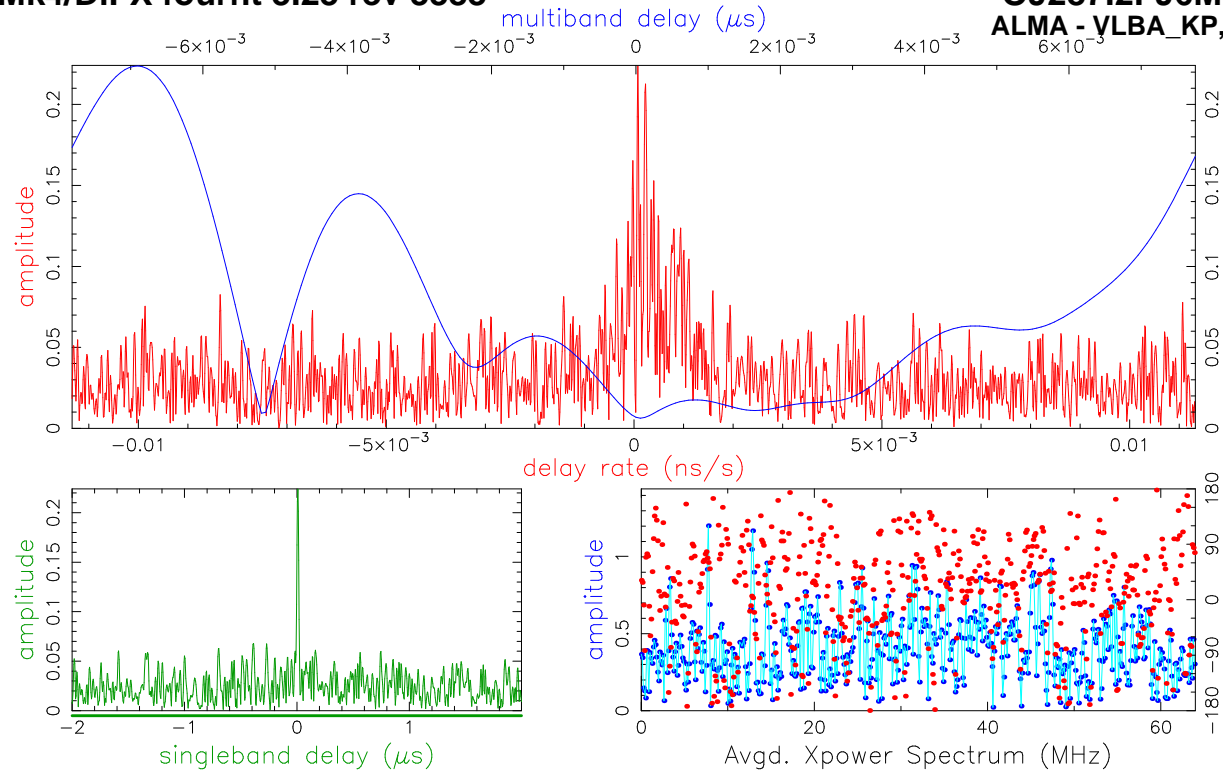
Fringe quality 9
SNR 8.2
Int time 299.973
Amp 0.174
Phase -177.1
PFD 1.5e-07
Delays (us)
SBD 0.011001
MBD -0.006922
Fringe rate (Hz) 0.006747
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211d
Yr:day 16383
2022:297:190419
2022:298:080536
2022:122:205858
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|---|--------------------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec) (SBD) | -1.40708545142E+04 | | | | | | | | | |
| Sband delay (usec) | -1.40708522168E+04 | | | | | | | | | |
| Phase delay (usec) | -1.40708632233E+04 | | | | | | | | | |
| Delay rate (us/s) | -8.88770447654E-01 | | | | | | | | | |
| Total phase (deg) | | | -20.1 | | | | | | | |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| nlags: 512 t_cohere infinite | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| pcal θ | | | | | | | | | | |
| Amplitude | | | | | | | | | | |
| Search (2048X32) | | | | | | | | | | |
| Interp. | | | | | | | | | | |
| Inc. seg. avg. | | | | | | | | | | |
| Inc. frq. avg. | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | |

ph/seg (deg) 80.6 33.4
amp/seg (%) 117.2 58.4
ph/frq (deg) 45.6 19.7
amp/frq (%) 44.6 34.4
RMS Theor. Amplitude 0.174 +/- 0.021
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
A: az 307.1 el 24.6 pa 128.6 k: az 208.3 el 76.7 pa 27.0 u, v (fr/asec) 5454.365 -6848.704 simultaneous interpolator
Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ak..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ak.W.14.2FJ6ME

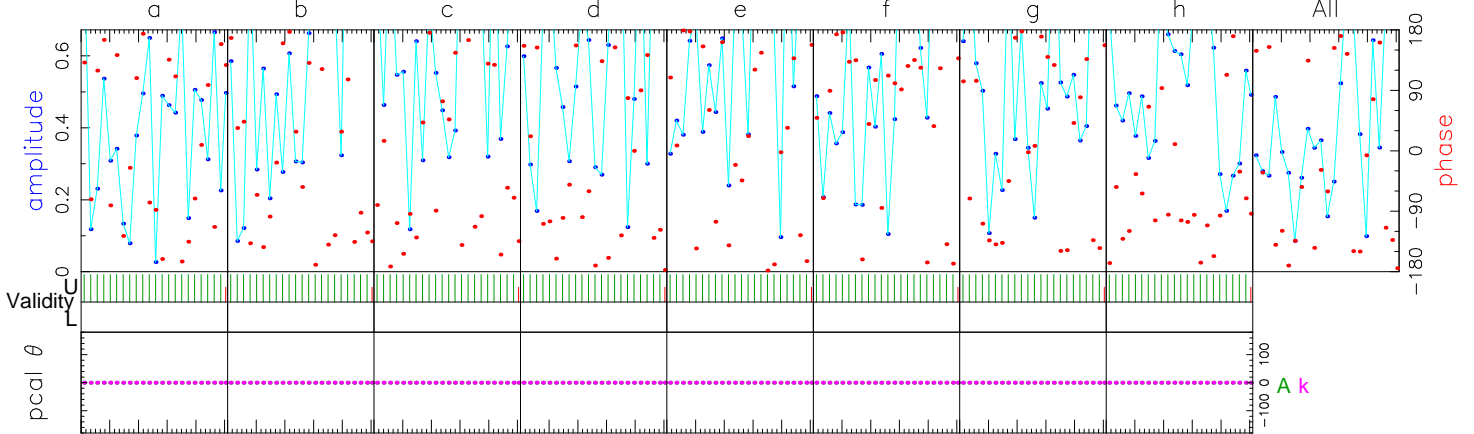


Fringe quality 9

SNR 10.6
Int time 299.973
Amp 0.224
Phase -163.0
PFD 2.3e-17
Delays (us)
SBD 0.007252
MBD -0.006920
Fringe rate (Hz) 0.006219
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build 2022:297:190419
2022:298:080542
2022:122:205858
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

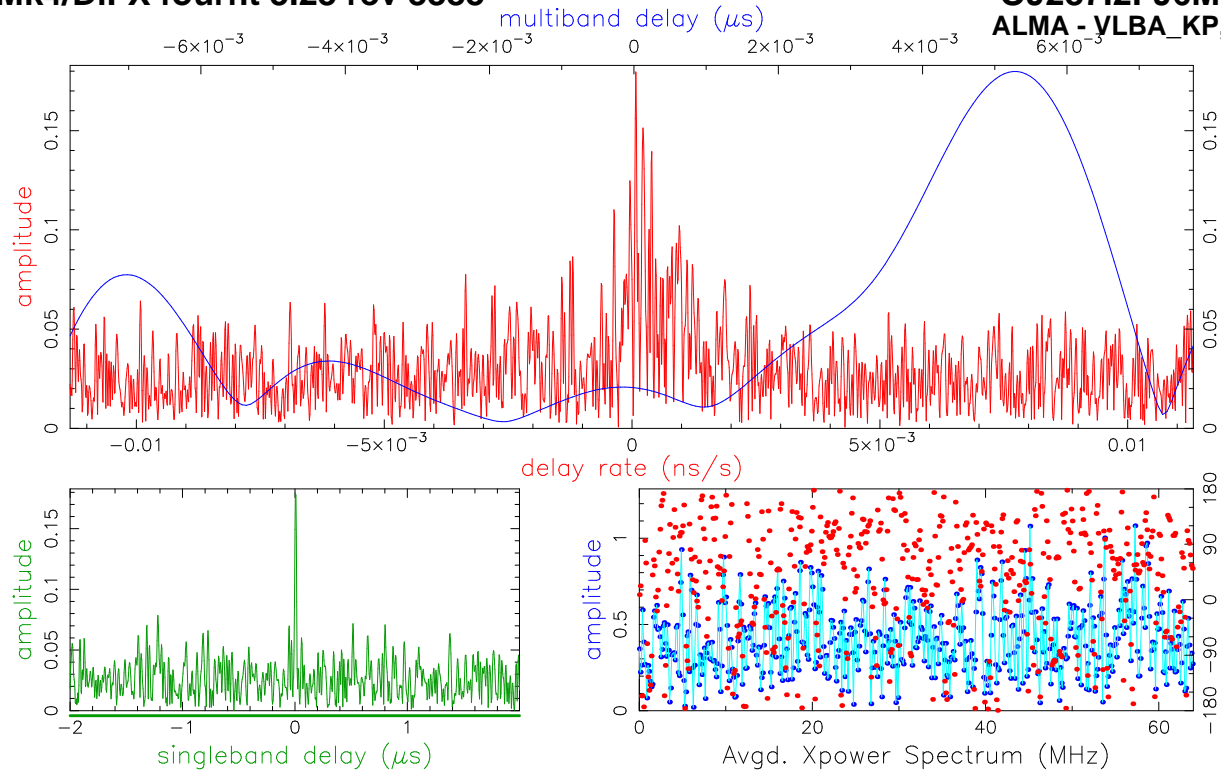


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | 175.8 | -155.7 | -138.1 | -144.1 | 169.8 | 133.0 | -172.2 | -107.9 | Phase | -163.0 |
| | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | Ampl. | 0.3 |
| | 517.4 | 515.1 | 514.3 | 514.5 | 143.4 | 515.2 | 893.5 | 515.4 | Sbd box | 514.9 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| k | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.40708545124E+04 | | Apriori delay (usec) | | -1.40708632176E+04 | | Resid mbdelay (usec) | | -6.91980E-03 | +/- 1.0E-04 |
| Sband delay (usec) | -1.40708559661E+04 | | Apriori clock (usec) | | -2.1079231E+03 | | Resid sbdelay (usec) | | 7.25150E-03 | +/- 8.1E-04 |
| Phase delay (usec) | -1.40708632229E+04 | | Apriori clockrate (us/s) | | -1.2300000E-06 | | Resid phdelay (usec) | | -5.25479E-06 | +/- 3.5E-07 |
| Delay rate (us/s) | -8.88770453777E-01 | | Apriori rate (us/s) | | -8.88770525976E-01 | | Resid rate (us/s) | | 7.21992E-08 | +/- 2.0E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.81421833409E-05 | | Resid phase (deg) | | -163.0 | +/- 10.8 |

ph/seg (deg) RMS Theor. Amplitude 0.224 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.5 25.9 Search (2048X32) 0.215 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 127.6 45.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.6 15.3 Inc. seg. avg. 0.374 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 33.2 26.6 Inc. frq. avg. 0.263 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

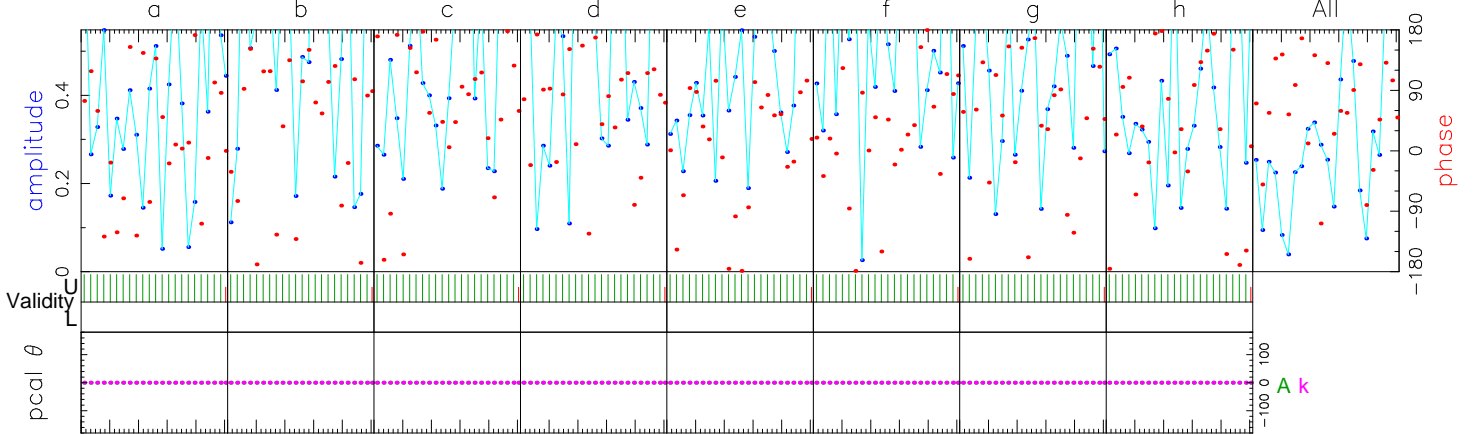
A: az 307.1 el 24.6 pa 128.6 k: az 208.3 el 76.7 pa 27.0 u,v (fr/asec) 5454.365 -6848.704 simultaneous interpolator

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ak..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ak.W.20.2FJ6ME



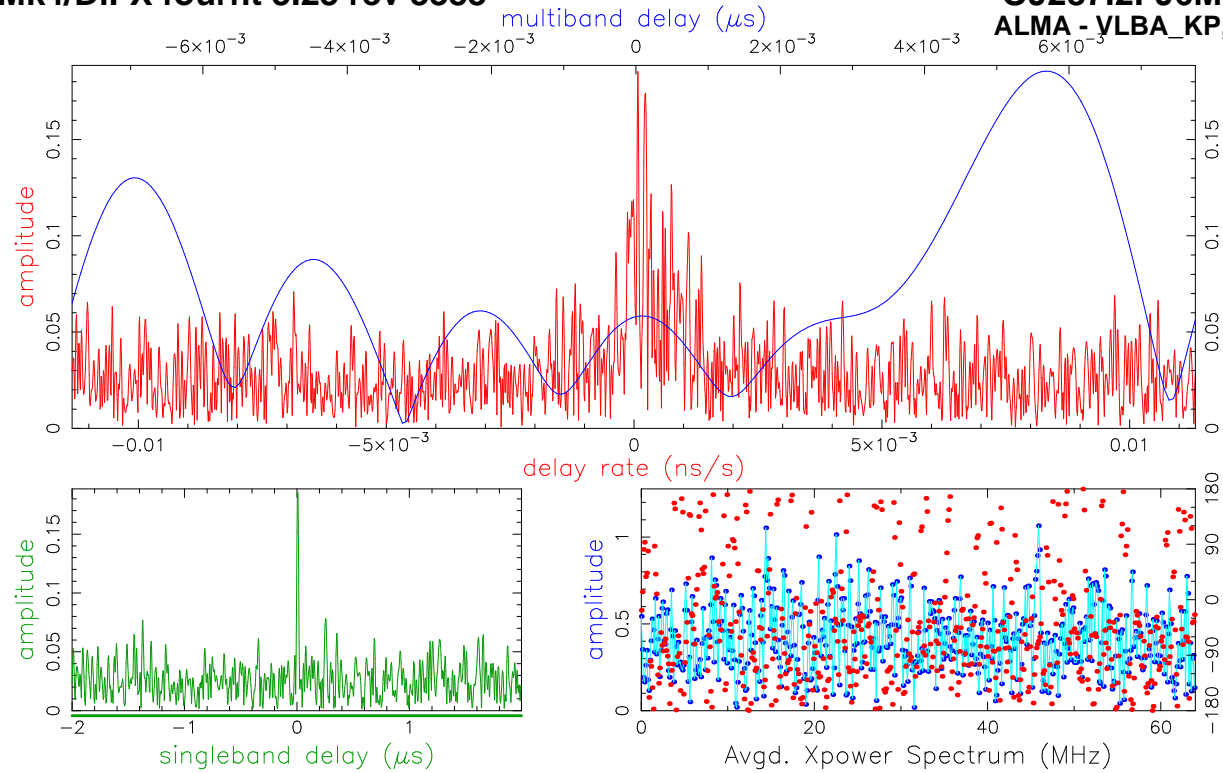
Fringe quality 9
SNR 8.7
Int time 299.973
Amp 0.183
Phase 85.4
PFD 3.5e-09
Delays (us)
SBD 0.005625
MBD 0.005347
Fringe rate (Hz) 0.006538
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080549
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|-------------|-------------|
| | 59.6 | 95.7 | 108.3 | 81.7 | 63.1 | 43.6 | 97.9 | 120.0 | Phase | 85.4 |
| | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | Ampl. | 0.2 |
| | 175.8 | 514.9 | 514.3 | 1017.9 | 515.0 | 200.4 | 121.1 | 517.7 | Sbd box | 514.4 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.40708578703E+04 | | Apriori delay (usec) | | -1.40708632176E+04 | | Resid mbdelay (usec) | | 5.34729E-03 | +/- 1.3E-04 |
| Sband delay (usec) | -1.40708575931E+04 | | Apriori clock (usec) | | -2.1079231E+03 | | Resid sbdelay (usec) | | 5.62450E-03 | +/- 9.9E-04 |
| Phase delay (usec) | -1.40708632148E+04 | | Apriori clockrate (us/s) | | -1.2300000E-06 | | Resid phdelay (usec) | | 2.75366E-06 | +/- 4.3E-07 |
| Delay rate (us/s) | -8.88770450073E-01 | | Apriori rate (us/s) | | -8.88770525976E-01 | | Resid rate (us/s) | | 7.59035E-08 | +/- 2.5E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.81421833409E-05 | | Resid phase (deg) | | 85.4 | +/- 13.2 |

ph/seg (deg) 74.2 31.7 Amplitude 0.183 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 119.8 55.4 Search (2048X32) 0.178 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 28.6 18.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.7 32.7 Inc. seg. avg. 0.263 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 A: az 307.1 el 24.6 pa 128.6 k: az 208.3 el 76.7 pa 27.0 u,v (fr/asec) 5454.365 -6848.704 simultaneous interpolator
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ak..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ak.W.28.2FJ6ME

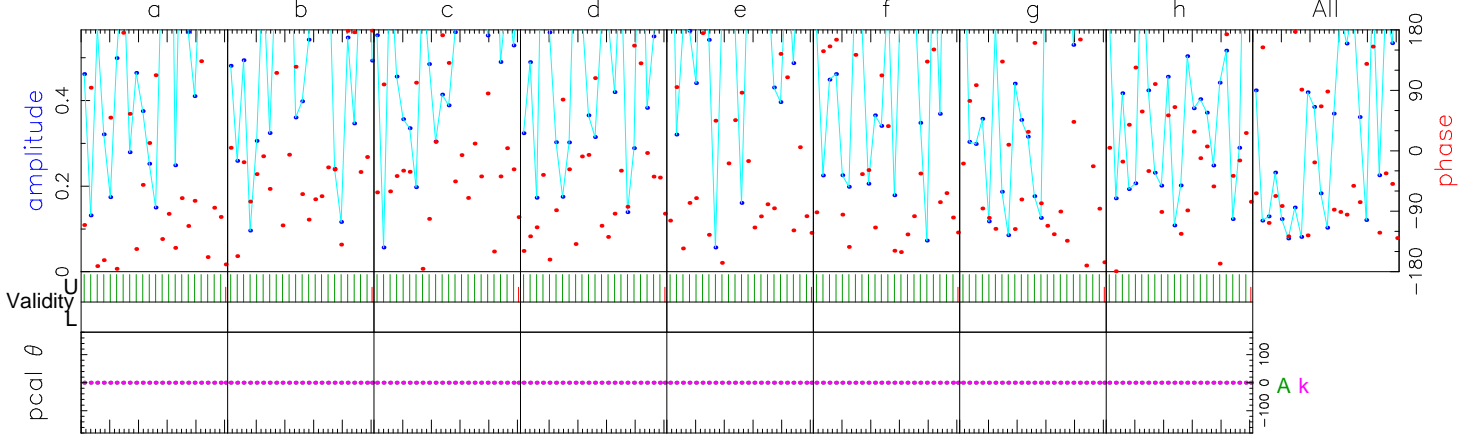


Fringe quality 9

SNR 8.9
Int time 299.973
Amp 0.188
Phase -84.5
PFD 3.3e-10
Delays (us)
SBD 0.006052
MBD 0.005622
Fringe rate (Hz) 0.006671
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

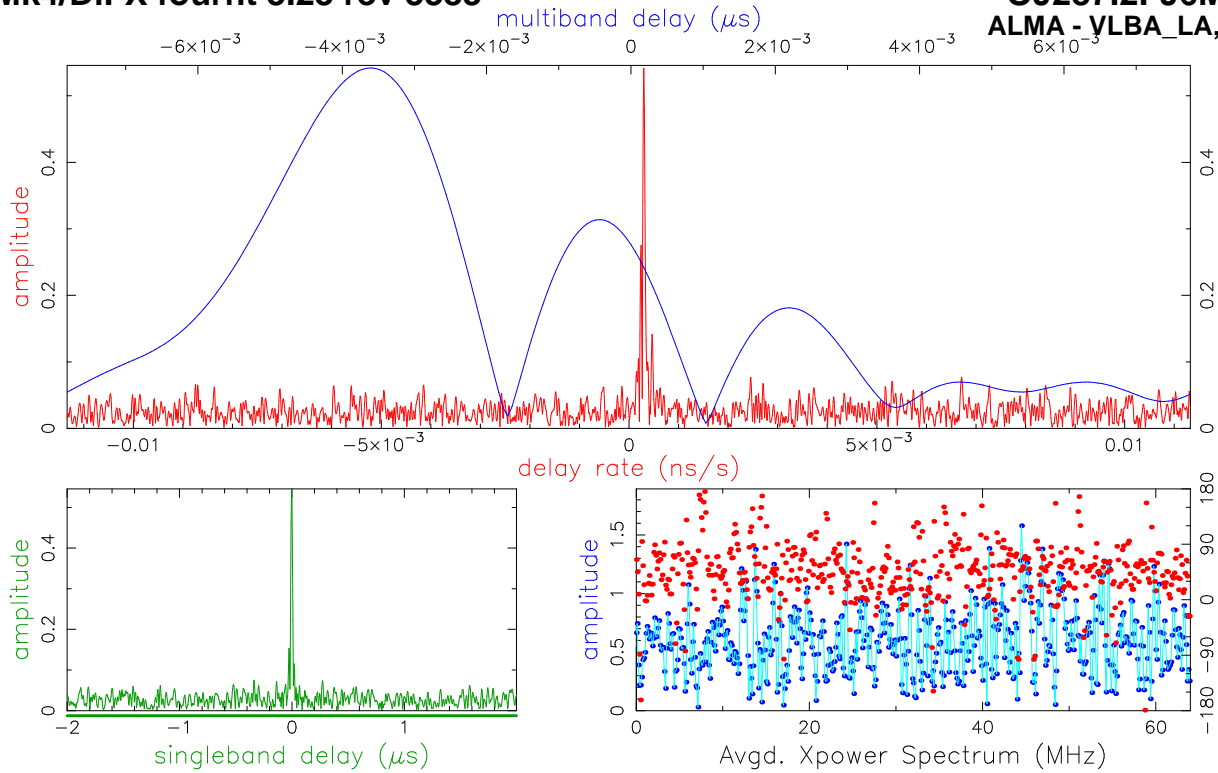
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080530
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -127.4 | -45.5 | -43.3 | -82.5 | -101.1 | -119.5 | -106.2 | 6.6 | Phase | -84.5 |
| | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Ampl. | 0.2 |
| | 516.1 | 515.3 | 514.2 | 515.0 | 513.9 | 513.4 | 515.1 | 302.6 | Sbd box | 514.5 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:k | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Mani PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| k | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| k | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.40708575951E+04 | | Apriori delay (usec) | | -1.40708632176E+04 | | Resid mbdelay (usec) | | 5.62248E-03 | +/- 1.2E-04 |
| Sband delay (usec) | -1.40708571658E+04 | | Apriori clock (usec) | | -2.1079231E+03 | | Resid sbdelay (usec) | | 6.05175E-03 | +/- 9.7E-04 |
| Phase delay (usec) | -1.40708632203E+04 | | Apriori clockrate (us/s) | | -1.2300000E-06 | | Resid phdelay (usec) | | -2.72629E-06 | +/- 4.1E-07 |
| Delay rate (us/s) | -8.88770448536E-01 | | Apriori rate (us/s) | | -8.88770525976E-01 | | Resid rate (us/s) | | 7.74404E-08 | +/- 2.4E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.81421833409E-05 | | Resid phase (deg) | | -84.5 | +/- 12.8 |

ph/seg (deg) 84.4 30.8 Amplitude 0.188 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 134.9 53.7 Search (2048X32) 0.183 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 50.5 18.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.3 31.7 Inc. seg. avg. 0.291 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 k: az 208.3 el 76.7 pa 27.0 u,v (fr/asec) 5454.365 -6848.704 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ak..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ak.W.8.2FJ6ME simultaneous interpolator

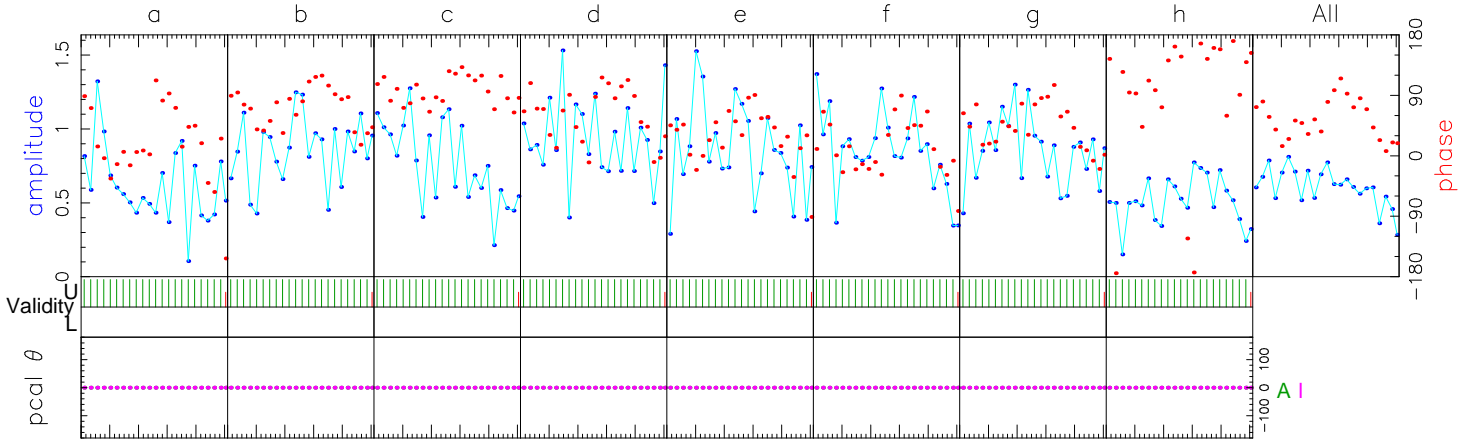


Fringe quality 7

SNR 25.8
Int time 299.973
Amp 0.546
Phase 55.6
PFD 0.0e+00
Delays (us)
SBD -0.002830
MBD -0.003555
Fringe rate (Hz)
0.025529
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c211d
Yr:day 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080537
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

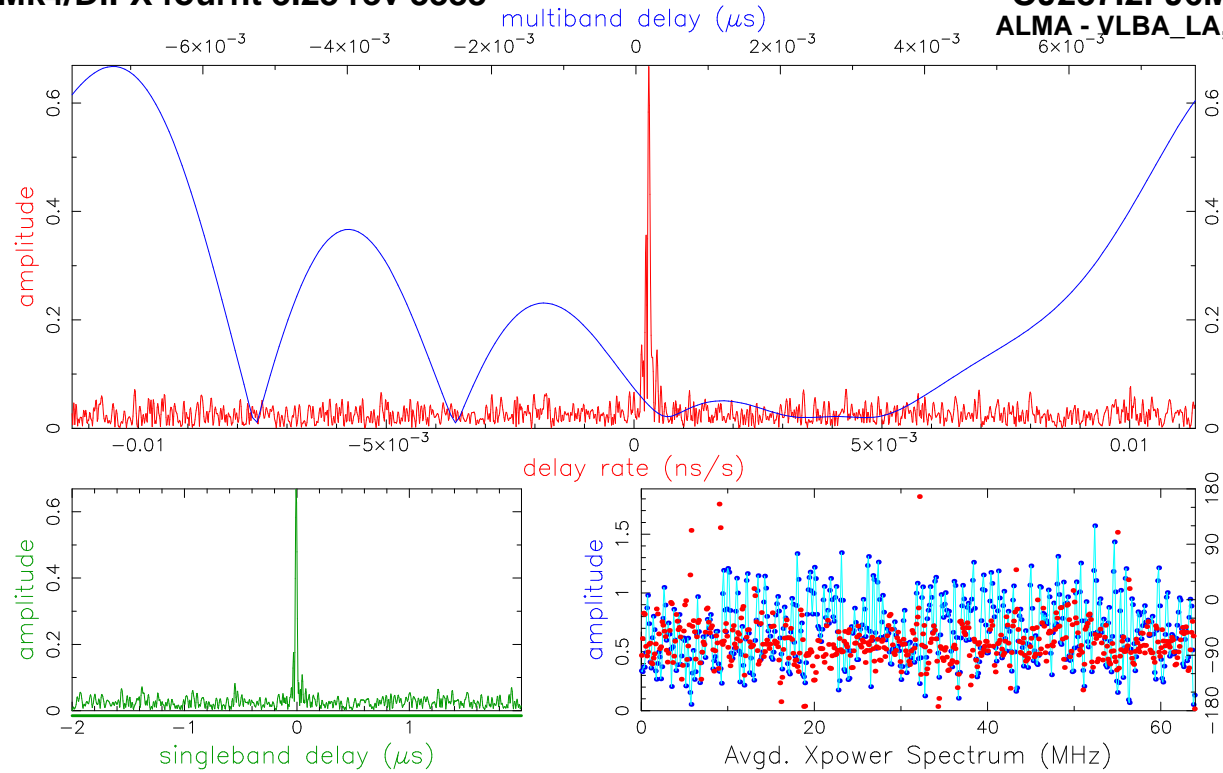


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | | |
| I | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec) (SBD) | -1.34722394077E+04 | | | | | | | | | |
| Sband delay (usec) | -1.34722386830E+04 | | | | | | | | | |
| Phase delay (usec) | -1.34722358512E+04 | | | | | | | | | |
| Delay rate (us/s) | -7.86425716401E-01 | | | | | | | | | |
| Total phase (deg) | | | -79.4 | | | | | | | |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |

ph/seg (deg) 29.1 10.6 Search (2048X32) 0.527 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 25.1 18.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 45.3 6.3 Inc. seg. avg. 0.605 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.7 10.9 Inc. frq. avg. 0.645 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 I: az 217.1 el 71.0 pa 33.0 u,v (fr/asec) 4826.601 -7459.696 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/AI..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/AI.W.16.2FJ6ME simultaneous interpolator

Mk4/DiFX fourfit 3.23 rev 3383

OJ287.2FJ6ME, No0022, AI
ALMA - VLBA_LA, fgroup W, pol YL

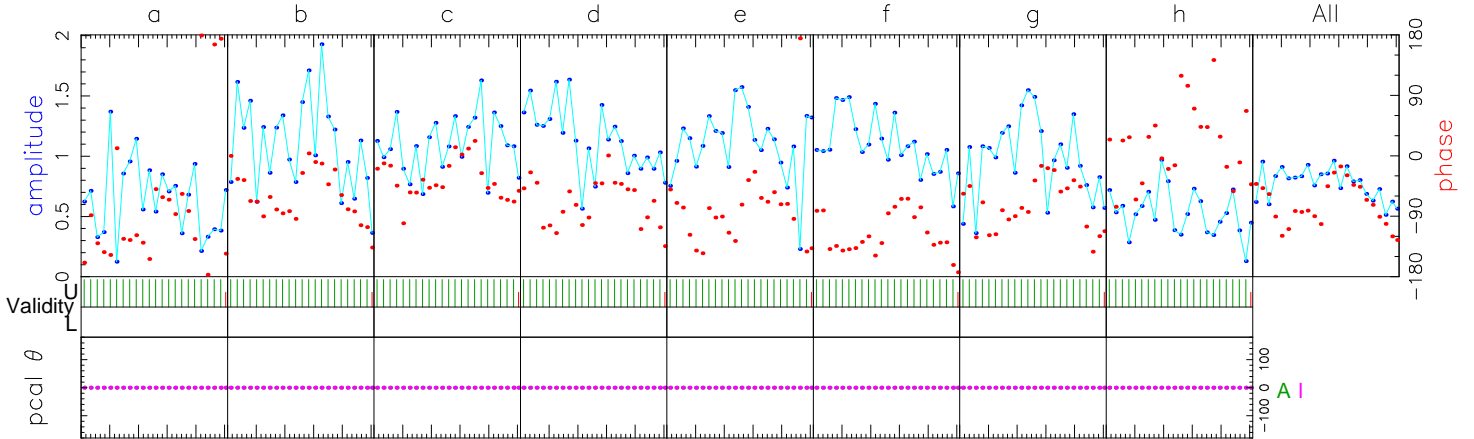


Fringe quality 5

SNR 31.7
Int time 299.973
Amp 0.669
Phase -71.1
PFD 0.0e+00
Delays (us)
SBD -0.007123
MBD -0.007208
Fringe rate (Hz) 0.025454
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

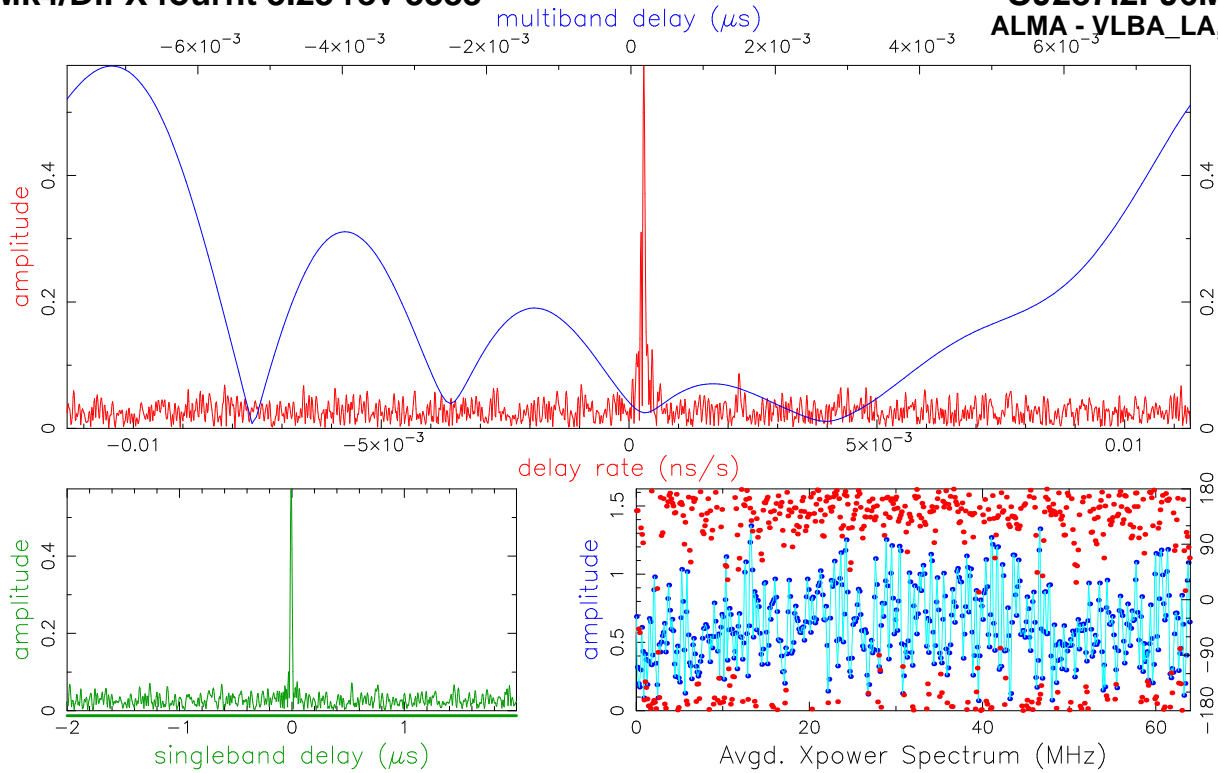
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build 2022:297:190419
2022:298:080548
2022:122:205858
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -119.5 | -52.2 | -32.9 | -67.2 | -87.8 | -116.4 | -69.8 | 9.6 | Phase | -71.1 |
| | 0.5 | 0.9 | 1.0 | 1.0 | 0.9 | 1.0 | 0.8 | 0.3 | Ampl. | 0.8 |
| | 513.3 | 511.1 | 511.1 | 511.2 | 511.3 | 511.1 | 511.4 | 513.8 | Sbd box | 511.2 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | |
| I | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.34722430613E+04 | | Apriori delay (usec) | | -1.34722358530E+04 | | Resid mbdelay (usec) | | -7.20836E-03 | +/- 3.4E-05 |
| Sband delay (usec) | -1.34722429760E+04 | | Apriori clock (usec) | | -2.1049568E+03 | | Resid sbdelay (usec) | | -7.12300E-03 | +/- 2.7E-04 |
| Phase delay (usec) | -1.34722358553E+04 | | Apriori clockrate (us/s) | | -9.4400009E-07 | | Resid phdelay (usec) | | -2.29202E-06 | +/- 1.2E-07 |
| Delay rate (us/s) | -7.86425717260E-01 | | Apriori rate (us/s) | | -7.86426012761E-01 | | Resid rate (us/s) | | 2.95501E-07 | +/- 6.7E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.28377498248E-05 | | Resid phase (deg) | | -71.1 | +/- 3.6 |

ph/seg (deg) 31.0 8.7 Search (2048X32) 0.658 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 24.7 15.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
ph/frq (deg) 46.6 5.1 Inc. seg. avg. 0.768 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 38.5 8.9 Inc. frq. avg. 0.794 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
A: az 307.1 el 24.6 pa 128.6 I: az 217.1 el 71.0 pa 33.0 u,v (fr/asec) 4826.601 -7459.696 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/AI..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/AI.W.26.2FJ6ME simultaneous interpolator

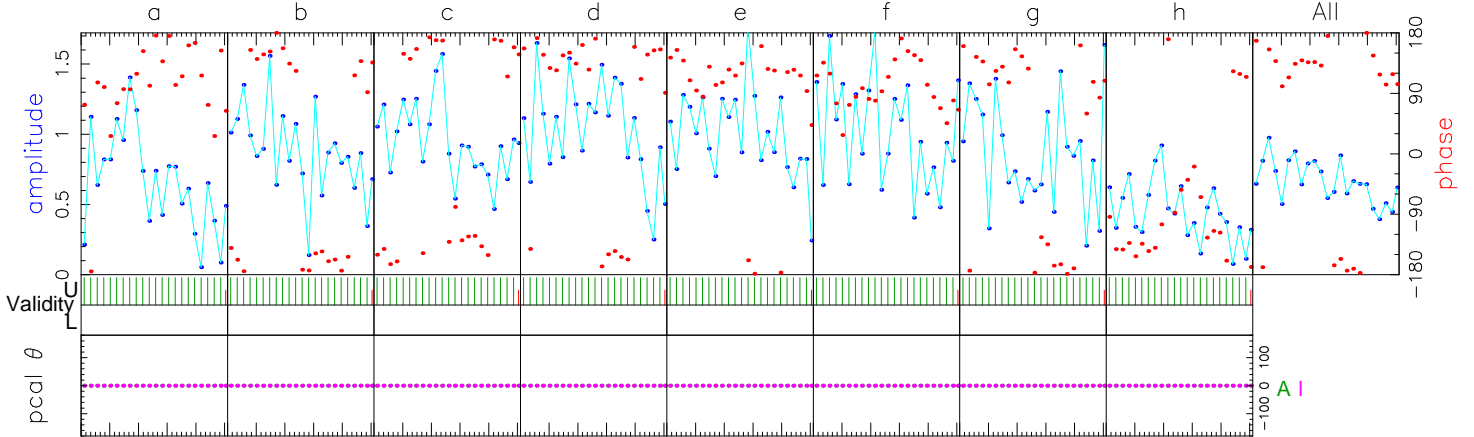


Fringe quality 7

SNR 27.2
Int time 299.973
Amp 0.574
Phase 152.2
PFD 0.0e+00
Delays (us)
SBD -0.007247
MBD -0.007161
Fringe rate (Hz)
0.025426
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080529
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

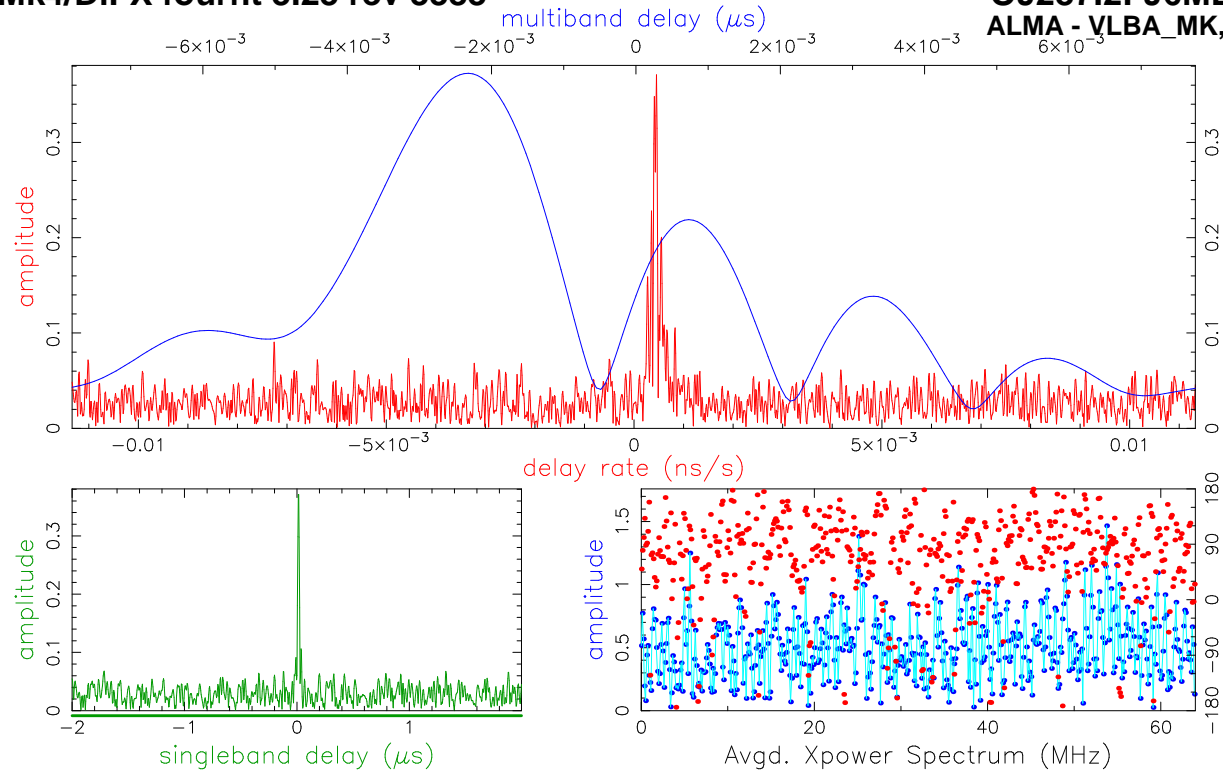
Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All | |
|------------------------------|--------------------|---|--------------------------|---|--------------------|---|----------------------|------------------------------|--------------|---------------------------|--------------|
| | 113.7 | 171.7 | -172.1 | 164.0 | 131.9 | 99.8 | 156.4 | -123.1 | Phase | 152.2 | |
| | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 0.3 | Ampl. | 0.7 | |
| | 513.1 | 511.3 | 511.0 | 511.1 | 511.0 | 511.4 | 511.3 | 513.5 | Sbd box | 511.1 | |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | |
| A:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | |
| A:I | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | ManI PC | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | |
| I | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | | |
| I | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | | |
| | | | | | | | | | Chan ids | | |
| | | | | | | | | | Tracks | | |
| Group delay (usec) (SBD) | -1.34722430142E+04 | | Apriori delay (usec) | | -1.34722358530E+04 | | Resid mbdelay (usec) | | -7.16121E-03 | +/- 4.0E-05 | |
| Sband delay (usec) | -1.34722431002E+04 | | Apriori clock (usec) | | -2.1049568E+03 | | Resid sbdelay (usec) | | -7.24725E-03 | +/- 3.2E-04 | |
| Phase delay (usec) | -1.34722358481E+04 | | Apriori clockrate (us/s) | | -9.4400009E-07 | | Resid phdelay (usec) | | 4.90829E-06 | +/- 1.4E-07 | |
| Delay rate (us/s) | -7.86425717591E-01 | | Apriori rate (us/s) | | -7.86426012761E-01 | | Resid rate (us/s) | | 2.95170E-07 | +/- 7.8E-10 | |
| Total phase (deg) | 17.2 | | Apriori accel (us/s/s) | | 2.28377498248E-05 | | Resid phase (deg) | | 152.2 | +/- 4.2 | |
| | RMS | Theor. | Amplitude | 0.574 +/- 0.021 | | Pcal mode: MANUAL, MANUAL | | PC period (AP's) 5, 5 | | | |
| ph/seg (deg) | 31.8 | 10.1 | Search (2048X32) | 0.563 | | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | | -2.000 2.000 | |
| amp/seg (%) | 30.7 | 17.6 | Interp. | 0.000 | | Bits/sample: 2x2 | | SampCntNorm: enabled | | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 47.7 | 6.0 | Inc. seg. avg. | 0.657 | | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | | -0.011 0.011 | |
| amp/frq (%) | 38.3 | 10.4 | Inc. frq. avg. | 0.693 | | Data rate(Mb/s): 2048 | | nlags: 512 t_cohere infinite | | ion window (TEC) | 0.00 0.00 |
| A: az 307.1 el 24.6 pa 128.6 | | I: az 217.1 el 71.0 pa 33.0 | | u, v (fr/asec) 4826.601 -7459.696 | | | | | | simultaneous interpolator | |
| Control file: cf_plain | | Input file: /Exps/c211d/v2/86ghz/1234/No0022/AI..2FJ6ME | | Output file: /Exps/c211d/v2/86ghz/1234/No0022/AI.W.7.2FJ6ME | | | | | | | |

Mk4/DiFX fourfit 3.23 rev 3383

OJ287.2FJ6ME, No0022, Am
ALMA - VLBA_MK, fgroup W, pol YR

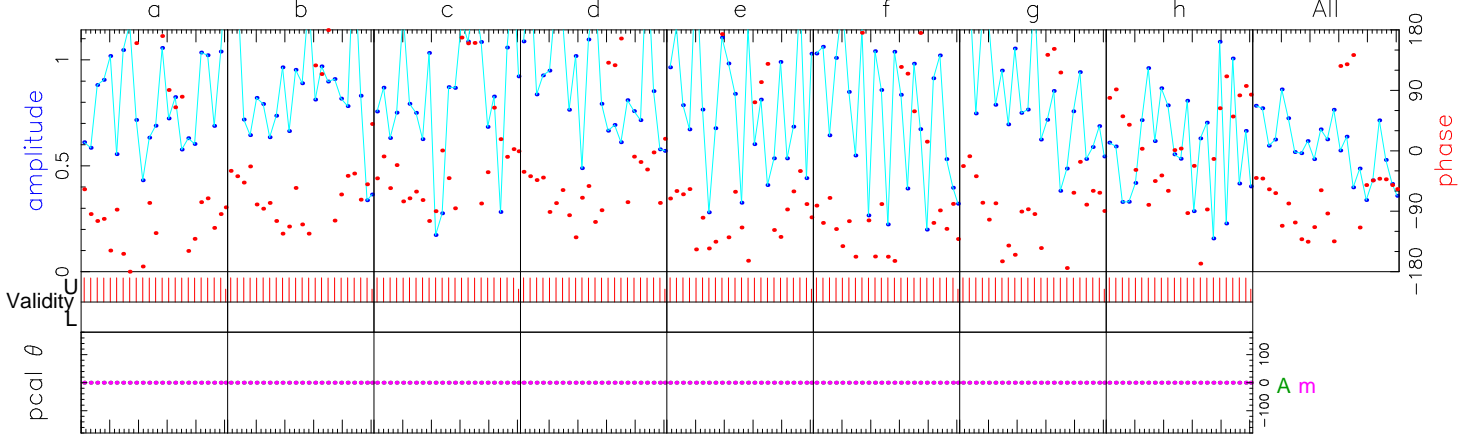


Fringe quality 8

SNR 16.9
Int time 262.489
Amp 0.381
Phase -84.8
PFD 0.0e+00
Delays (us)
SBD 0.013683
MBD -0.002442
Fringe rate (Hz) 0.039376
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080533
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

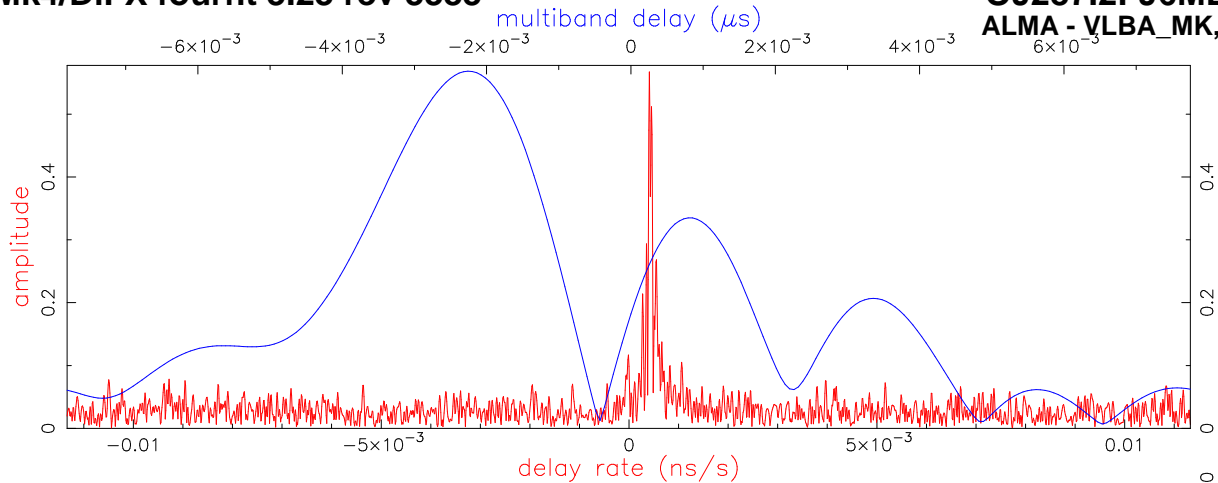


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -124.0 | -75.5 | -52.1 | -60.4 | -105.2 | -128.8 | -88.0 | 4.6 | Phase | -84.8 |
| | 0.4 | 0.5 | 0.4 | 0.6 | 0.4 | 0.5 | 0.5 | 0.2 | Ampl. | 0.4 |
| | 518.0 | 516.0 | 516.1 | 516.0 | 516.2 | 516.5 | 517.4 | 519.3 | Sbd box | 516.5 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:m | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:m | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | |
| m | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.09889673142E+04 | | Apriori delay (usec) | | -1.09889804970E+04 | | Resid mbdelay (usec) | | -2.44212E-03 | +/- 6.4E-05 |
| Sband delay (usec) | -1.09889668143E+04 | | Apriori clock (usec) | | -2.1233306E+03 | | Resid sbdelay (usec) | | 1.36828E-02 | +/- 5.1E-04 |
| Phase delay (usec) | -1.09889804998E+04 | | Apriori clockrate (us/s) | | -1.5480000E-06 | | Resid phdelay (usec) | | -2.73464E-06 | +/- 2.2E-07 |
| Delay rate (us/s) | -1.86349158434E+00 | | Apriori rate (us/s) | | -1.86349204146E+00 | | Resid rate (us/s) | | 4.57111E-07 | +/- 1.3E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 1.90168424129E-05 | | Resid phase (deg) | | -84.8 | +/- 6.8 |

ph/seg (deg) 61.6 16.3 Theor. Amplitude 0.381 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.9 28.4 Search (2048X32) 0.367 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 47.7 9.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.2 16.8 Inc. seg. avg. 0.572 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

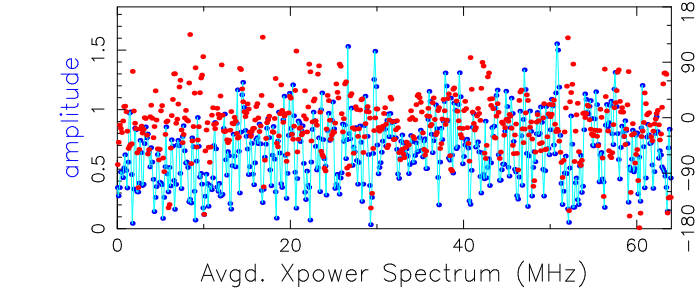
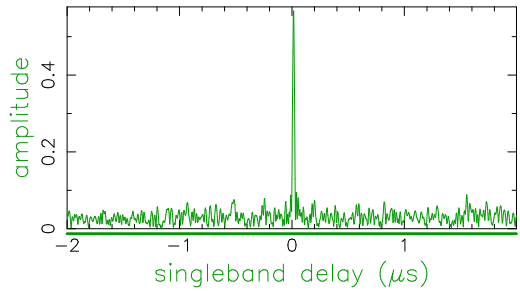
A: az 307.1 el 24.6 pa 128.6 m: az 83.1 el 55.1 pa -83.9 u,v (fr/asec) 11385.732 -5540.342 simultaneous interpolator

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Am..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Am.W.12.2FJ6ME



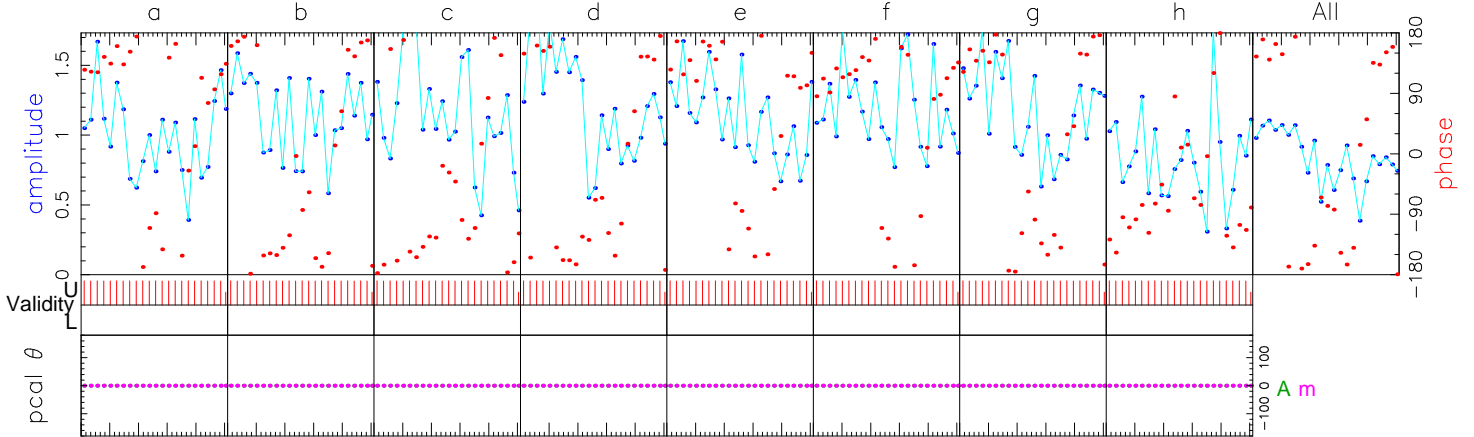
Fringe quality 6

SNR 25.6
Int time 262.489
Amp 0.578
Phase 176.6
PFD 0.0e+00
Delays (us)
SBD 0.013898
MBD -0.002334
Fringe rate (Hz)
0.035497
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



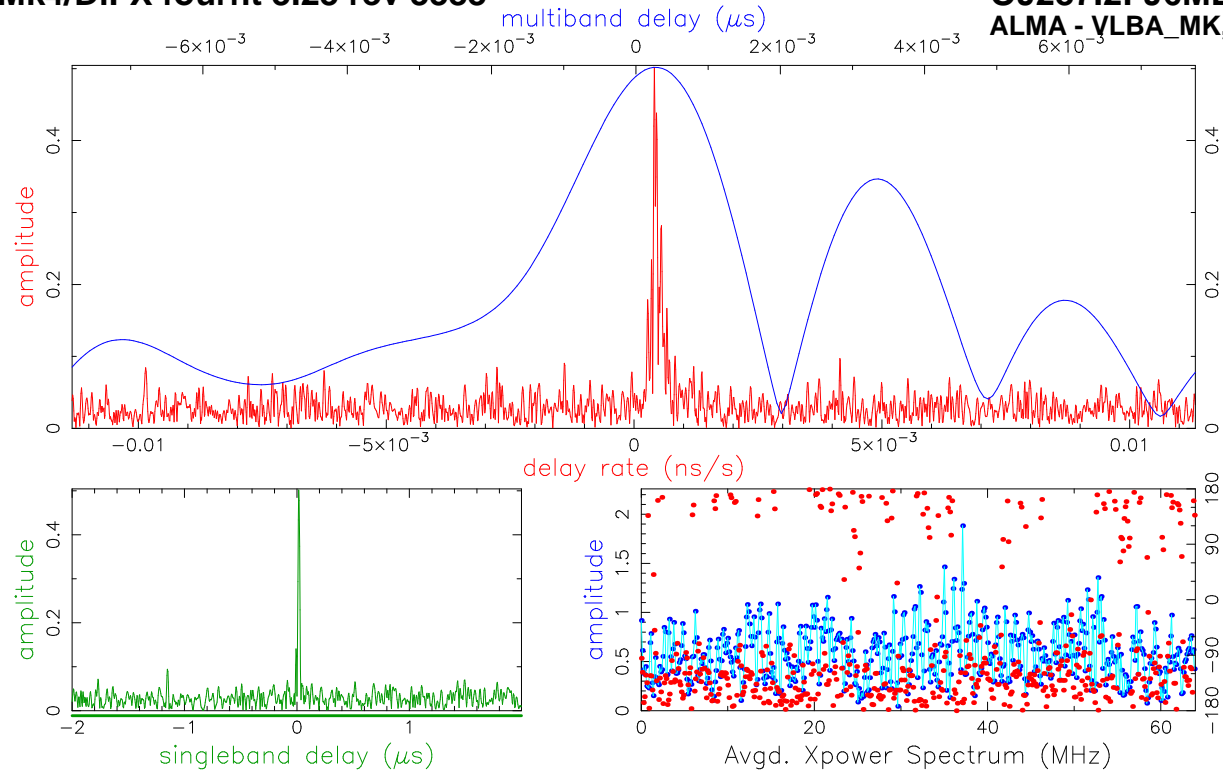
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080539
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | 142.5 | -172.5 | -148.4 | -170.5 | 160.3 | 133.7 | 173.1 | -99.4 | Phase | 176.6 |
| | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 | 0.8 | 0.7 | 0.4 | Ampl. | 0.7 |
| | 517.9 | 516.1 | 516.0 | 516.5 | 516.3 | 516.3 | 517.3 | 518.9 | Sbd box | 516.6 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:m | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:m | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| m | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.09889672061E+04 | | Apriori delay (usec) | | -1.09889804970E+04 | | Resid mbdelay (usec) | | -2.33407E-03 | +/- 4.2E-05 |
| Sband delay (usec) | -1.09889665988E+04 | | Apriori clock (usec) | | -2.1233306E+03 | | Resid sbdelay (usec) | | 1.38982E-02 | +/- 3.4E-04 |
| Phase delay (usec) | -1.09889804913E+04 | | Apriori clockrate (us/s) | | -1.5480000E-06 | | Resid phdelay (usec) | | 5.69610E-06 | +/- 1.4E-07 |
| Delay rate (us/s) | -1.86349162937E+00 | | Apriori rate (us/s) | | -1.86349204146E+00 | | Resid rate (us/s) | | 4.12084E-07 | +/- 8.3E-10 |
| Total phase (deg) | 171.1 | | Apriori accel (us/s/s) | | 1.90168424129E-05 | | Resid phase (deg) | | 176.6 | +/- 4.5 |

ph/seg (deg) 64.0 10.7 Search (2048X32) 0.558 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.0 18.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 44.4 6.3 Inc. seg. avg. 0.827 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.0 11.1 Inc. frq. avg. 0.672 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 A: az 307.1 el 24.6 pa 128.6 m: az 83.1 el 55.1 pa -83.9 u,v (fr/asec) 11385.732 -5540.342 simultaneous interpolator
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Am..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Am.W.19.2FJ6ME

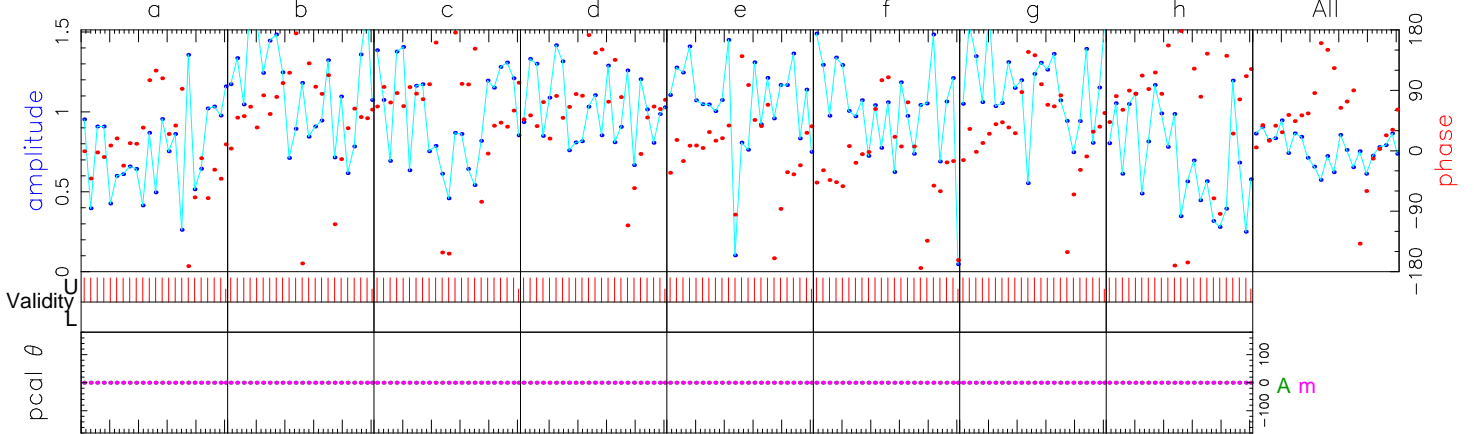


Fringe quality 8

SNR 22.3
Int time 262.489
Amp 0.504
Phase 45.8
PFD 0.0e+00
Delays (us)
SBD 0.016557
MBD 0.000313
Fringe rate (Hz) 0.035436
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

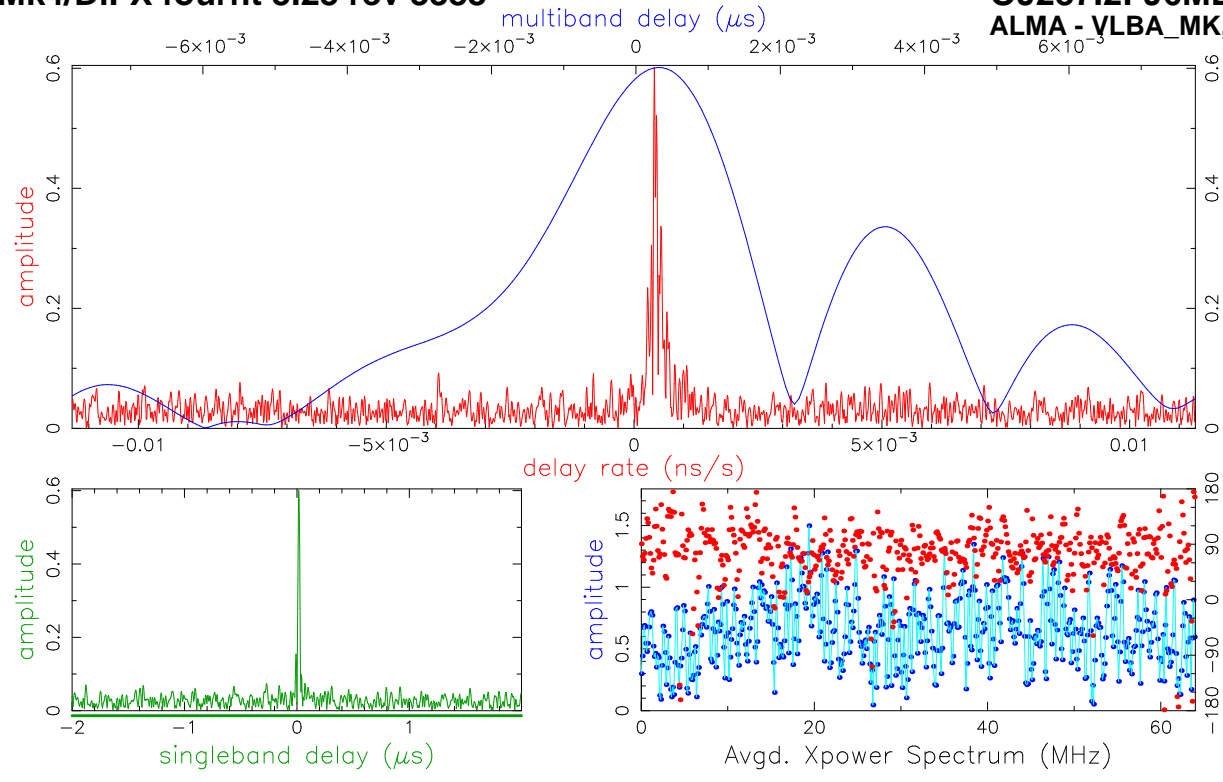
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080544
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|---|--------------------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 517.2 | 517.2 |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.6 |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| A:m | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| A:m | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | | |
| m | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec) (SBD) | -1.09889645587E+04 | | | | | | | | 3.13340E-04 | +/- 4.9E-05 |
| Sband delay (usec) | -1.09889639398E+04 | | | | | | | | 1.65573E-02 | +/- 3.9E-04 |
| Phase delay (usec) | -1.09889804956E+04 | | | | | | | | 1.47536E-06 | +/- 1.7E-07 |
| Delay rate (us/s) | -1.86349163008E+00 | | | | | | | | 4.11373E-07 | +/- 9.5E-10 |
| Total phase (deg) | | | 40.2 | | | | | | 45.8 | +/- 5.1 |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| nlags: 512 t_cohere infinite | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |

ph/seg (deg) 61.8 12.3 Search (2048X32) 0.491 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 55.9 21.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
ph/frq (deg) 44.9 7.3 Inc. seg. avg. 0.752 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 34.4 12.7 Inc. frq. avg. 0.617 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
A: az 307.1 el 24.6 pa 128.6 m: az 83.1 el 55.1 pa -83.9 u,v (fr/asec) 11385.732 -5540.342 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Am..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Am.W.25.2FJ6ME simultaneous interpolator

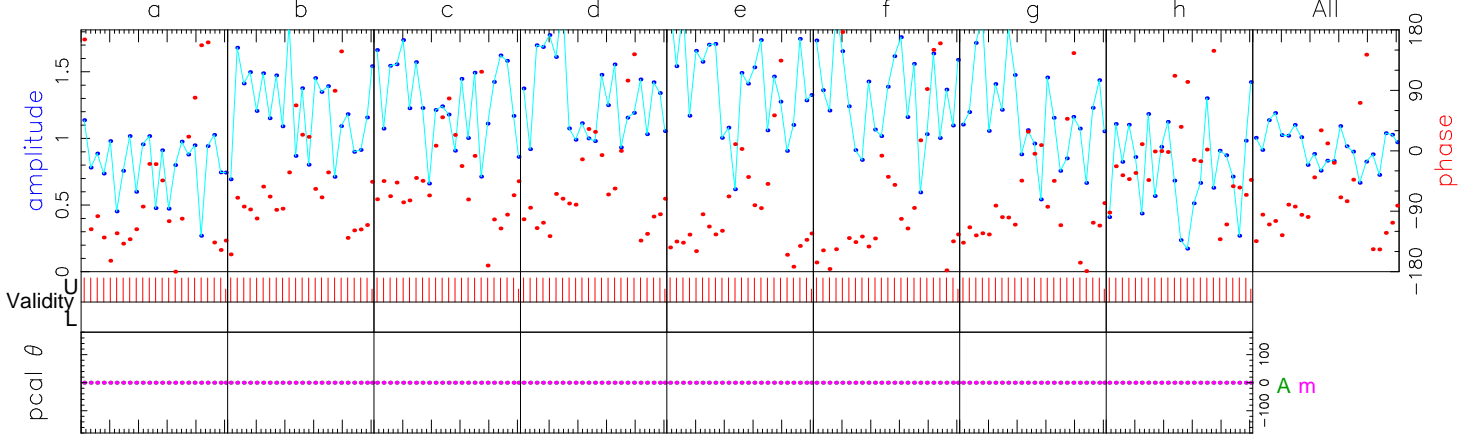


Fringe quality 6

SNR 26.8
Int time 262.489
Amp 0.605
Phase -91.2
PFD 0.0e+00
Delays (us)
SBD 0.016671
MBD 0.000386
Fringe rate (Hz) 0.035550
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080527
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

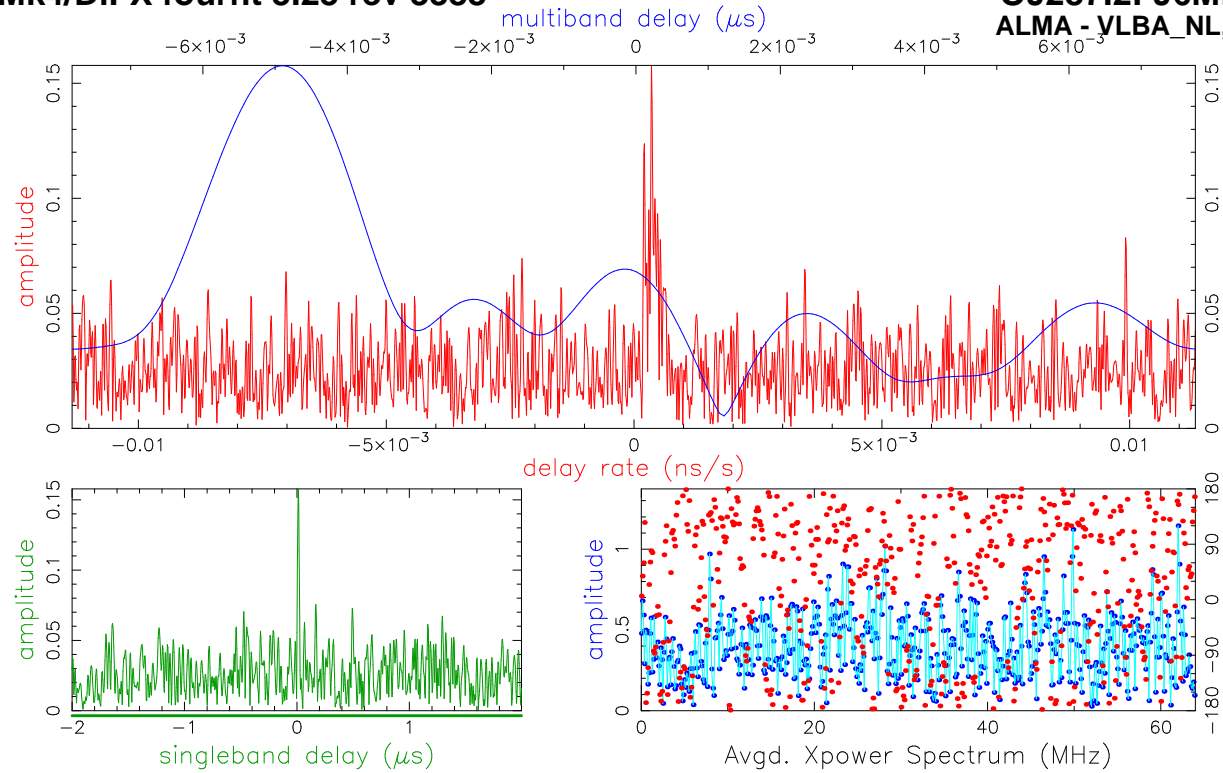


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -125.7 | -71.4 | -54.8 | -80.5 | -115.2 | -137.9 | -102.8 | -32.2 | Phase | -91.2 |
| | 0.4 | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 | 0.8 | 0.5 | Ampl. | 0.7 |
| | 519.4 | 517.0 | 517.0 | 516.9 | 517.2 | 516.9 | 517.7 | 518.8 | Sbd box | 517.3 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:m | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:m | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| m | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| m | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.09889644864E+04 | | Apriori delay (usec) | | -1.09889804970E+04 | | Resid mbdelay (usec) | | 3.85653E-04 | +/- 4.1E-05 |
| Sband delay (usec) | -1.09889638260E+04 | | Apriori clock (usec) | | -2.1233306E+03 | | Resid sbdelay (usec) | | 1.66710E-02 | +/- 3.2E-04 |
| Phase delay (usec) | -1.09889805000E+04 | | Apriori clockrate (us/s) | | -1.5480000E-06 | | Resid phdelay (usec) | | -2.94226E-06 | +/- 1.4E-07 |
| Delay rate (us/s) | -1.86349162876E+00 | | Apriori rate (us/s) | | -1.86349204146E+00 | | Resid rate (us/s) | | 4.12701E-07 | +/- 8.0E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 1.90168424129E-05 | | Resid phase (deg) | | -91.2 | +/- 4.3 |

ph/seg (deg) 63.1 10.3 Search (2048X32) 0.582 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.4 17.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 39.6 6.0 Inc. seg. avg. 0.924 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.3 10.6 Inc. frq. avg. 0.706 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 307.1 el 24.6 pa 128.6 m: az 83.1 el 55.1 pa -83.9 u,v (fr/asec) 11385.732 -5540.342 simultaneous interpolator

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Am..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Am.W.5.2FJ6ME

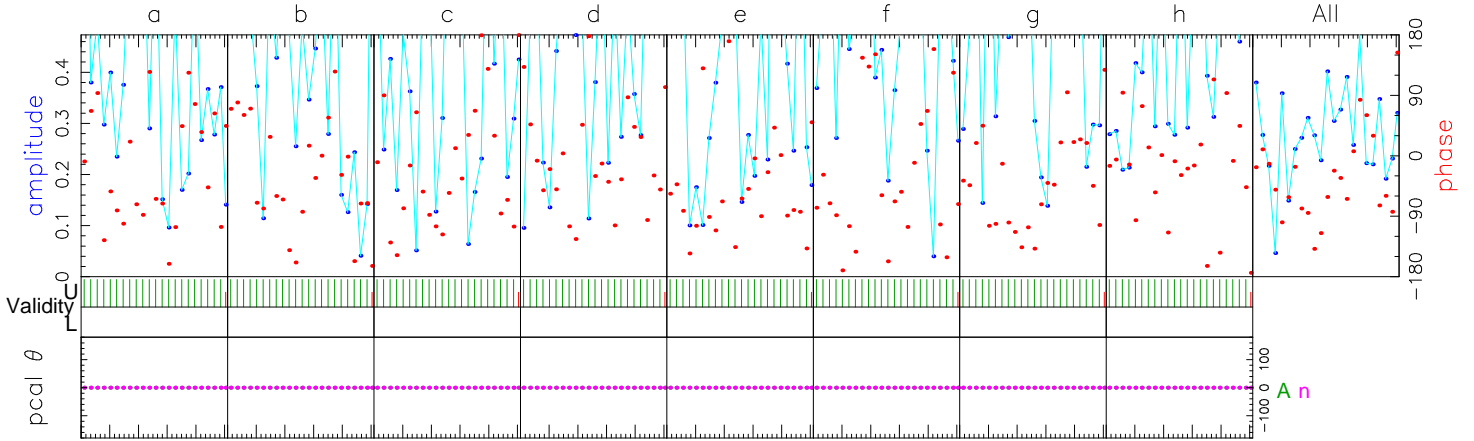


Fringe quality 9

SNR 7.5
Int time 299.975
Amp 0.158
Phase -45.0
PFD 5.1e-05
Delays (us)
SBD 0.012091
MBD -0.004886
Fringe rate (Hz) 0.030220
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

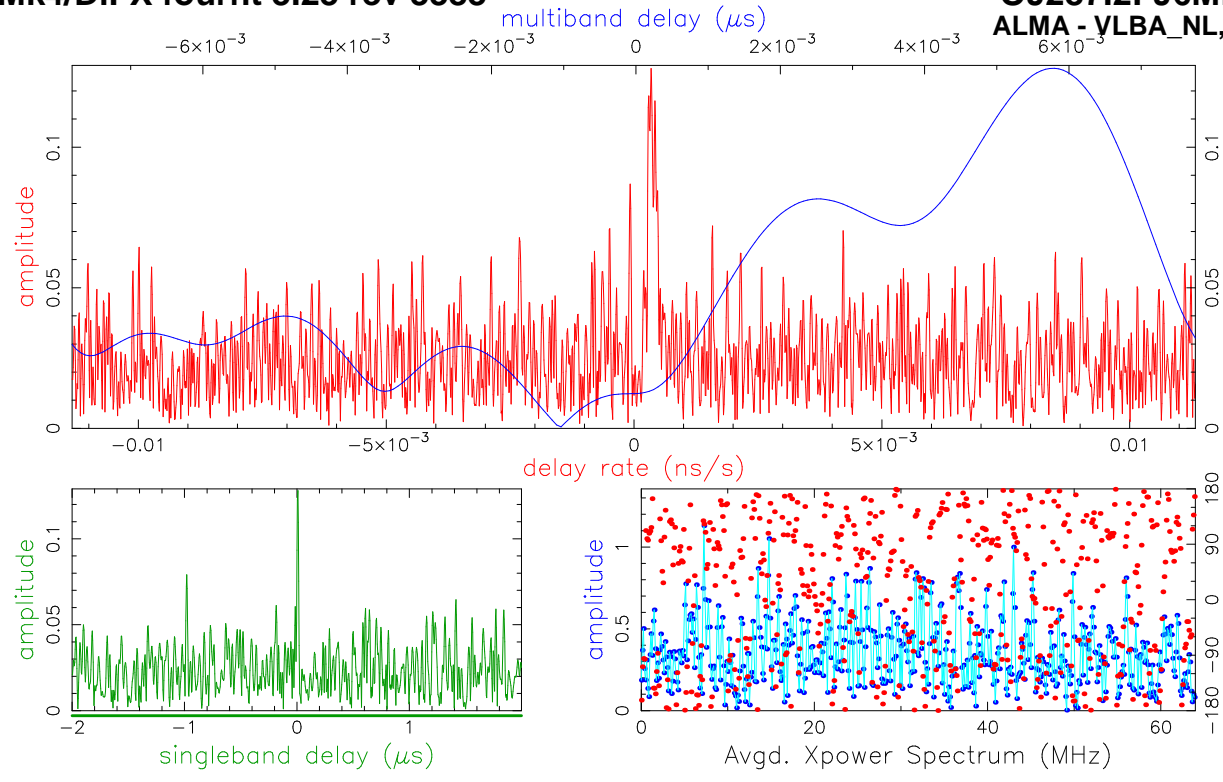
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build 2022:297:190419
2022:298:080548
2022:122:205858
RA & Dec (J2000) 08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



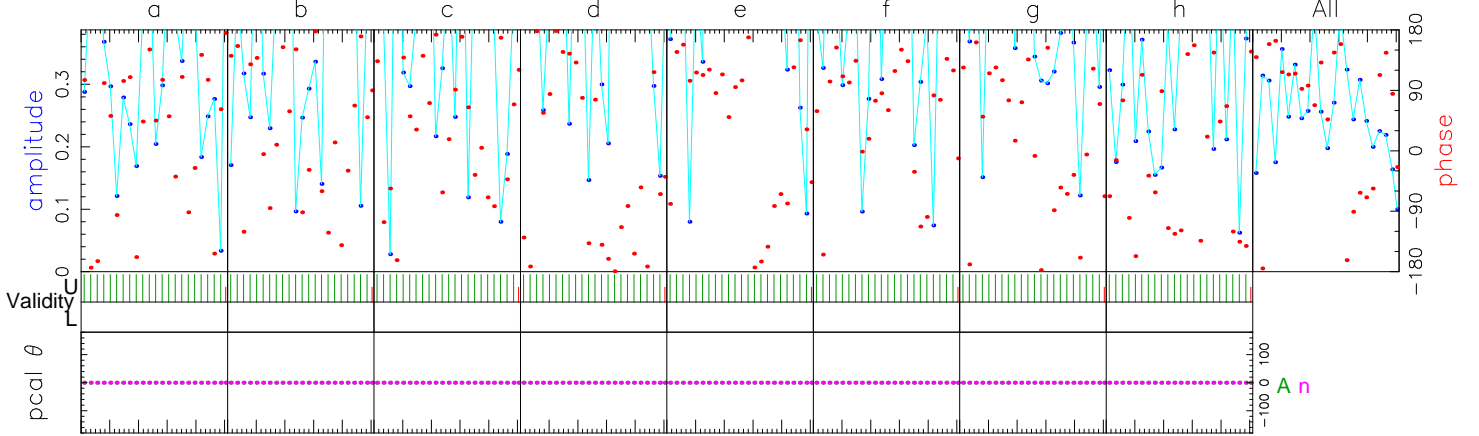
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -35.8 | 5.3 | -59.1 | -27.8 | -66.2 | -108.2 | -48.6 | -8.2 | Phase | -45.0 |
| | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Ampl. | 0.2 |
| | 10.1 | 390.6 | 224.0 | 515.0 | 515.6 | 336.8 | 516.2 | 517.1 | Sbd box | 516.1 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.14886335895E+04 | | Apriori delay (usec) | | -1.14886443285E+04 | | Resid mbdelay (usec) | | -4.88601E-03 | +/- 1.5E-04 |
| Sband delay (usec) | -1.14886322375E+04 | | Apriori clock (usec) | | -2.1130918E+03 | | Resid sbdelay (usec) | | 1.20910E-02 | +/- 1.2E-03 |
| Phase delay (usec) | -1.14886443300E+04 | | Apriori clockrate (us/s) | | -1.5300001E-06 | | Resid phdelay (usec) | | -1.45271E-06 | +/- 4.9E-07 |
| Delay rate (us/s) | -5.46156596062E-01 | | Apriori rate (us/s) | | -5.46156946889E-01 | | Resid rate (us/s) | | 3.50827E-07 | +/- 2.9E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 9.10179640400E-06 | | Resid phase (deg) | | -45.0 | +/- 15.3 |

ph/seg (deg) 59.1 36.8 Search (2048X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 96.7 64.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 38.6 21.7 Inc. seg. avg. 0.232 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.8 37.9 Inc. frq. avg. 0.171 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 n: az 234.3 el 58.7 pa 39.9 u,v (fr/asec) 3351.072 -8527.464 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/An..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/An.W.27.2FJ6ME



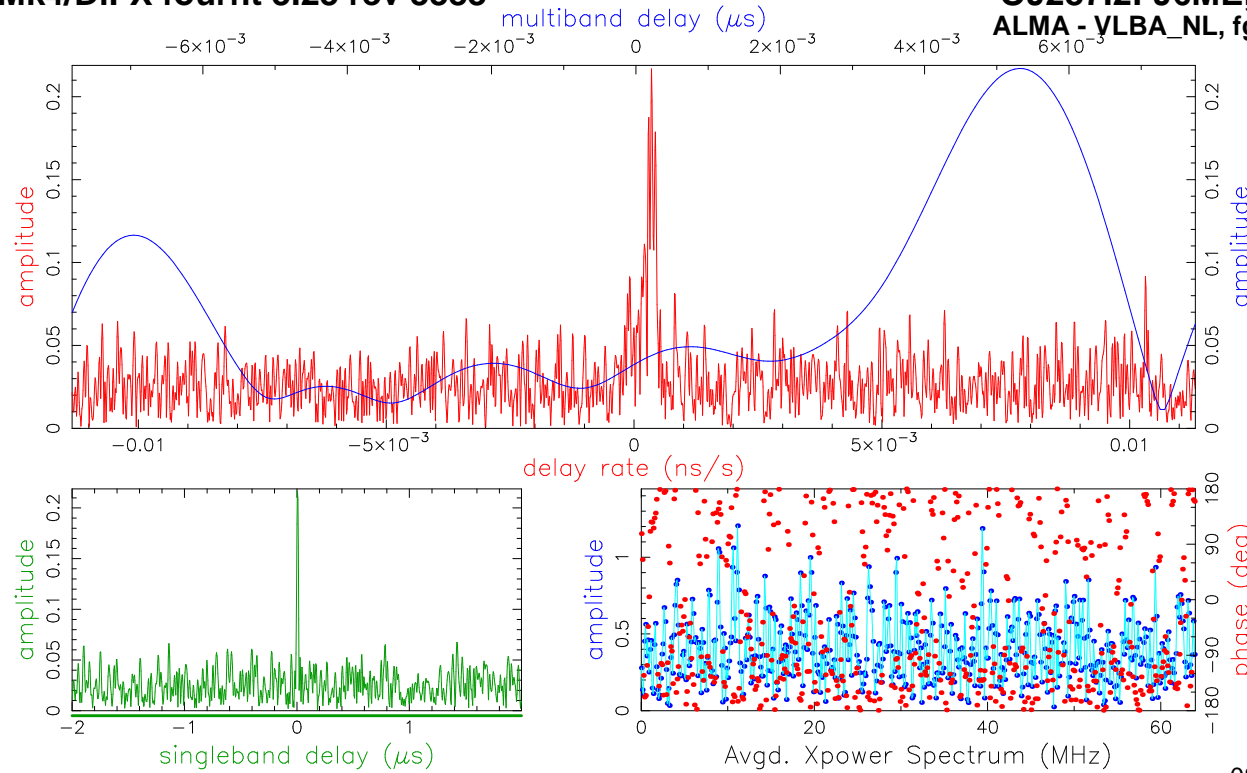
Fringe quality 0
SNR 6.1
Int time 299.975
Amp 0.129
Phase 133.7
PFD 4.1e-01
Delays (us)
SBD 0.006701
MBD 0.005737
Fringe rate (Hz) 0.029628
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build 2022:297:190419
2022:298:080602
2022:122:205858
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|---|--------------------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | | |
| Group delay (usec) (SBD) | -1.14886385917E+04 | | | | | | | | 5.73683E-03 | +/- 1.8E-04 |
| Sband delay (usec) | -1.14886376273E+04 | | | | | | | | 6.70125E-03 | +/- 1.4E-03 |
| Phase delay (usec) | -1.14886443242E+04 | | | | | | | | 4.31289E-06 | +/- 6.0E-07 |
| Delay rate (us/s) | -5.46156602942E-01 | | | | | | | | 3.43947E-07 | +/- 3.5E-09 |
| Total phase (deg) | | | -31.7 | | | | | | 133.7 | +/- 18.7 |
| 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 | | | | | | | | | | |
| Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| nlags: 512 t_cohere infinite | | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| sb window (us) -2.000 2.000 | | | | | | | | | | |
| mb window (us) -0.008 0.008 | | | | | | | | | | |
| dr window (ns/s) -0.011 0.011 | | | | | | | | | | |
| ion window (TEC) 0.00 0.00 | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | |

ph/seg (deg) 78.9 45.0 Search (2048X32) 0.127 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 120.0 78.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 44.4 26.5 Inc. seg. avg. 0.202 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 68.0 46.3 Inc. frq. avg. 0.138 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 n: az 234.3 el 58.7 pa 39.9 u,v (fr/asec) 3351.072 -8527.464 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/An..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/An.W.30.2FJ6ME simultaneous interpolator

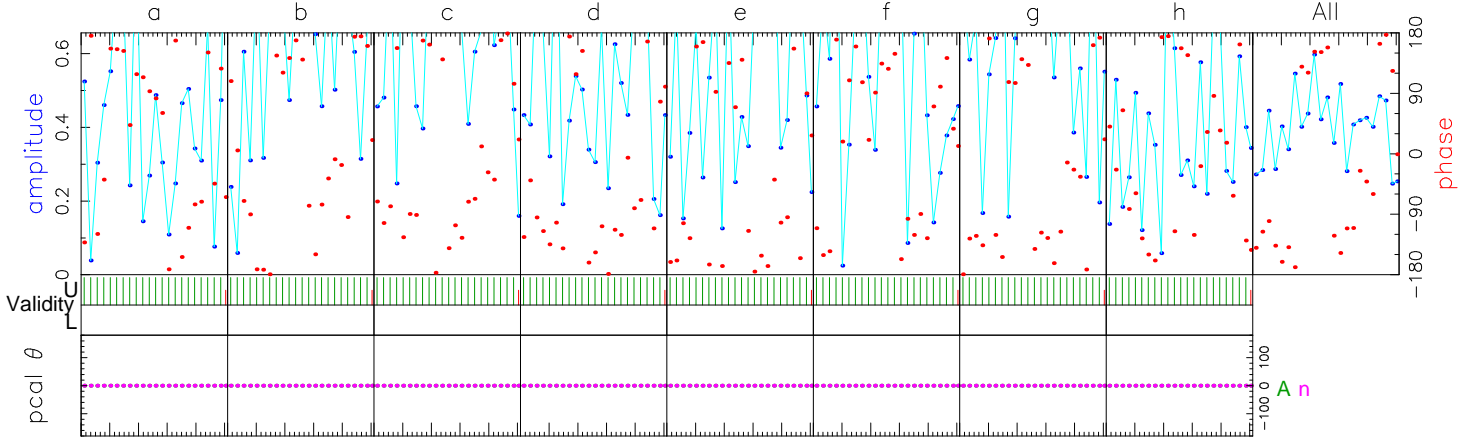


Fringe quality 9

SNR 10.4
Int time 299.975
Amp 0.219
Phase -157.7
PFD 3.2e-16
Delays (us)
SBD 0.005098
MBD 0.005380
Fringe rate (Hz)
0.030446
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080615
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

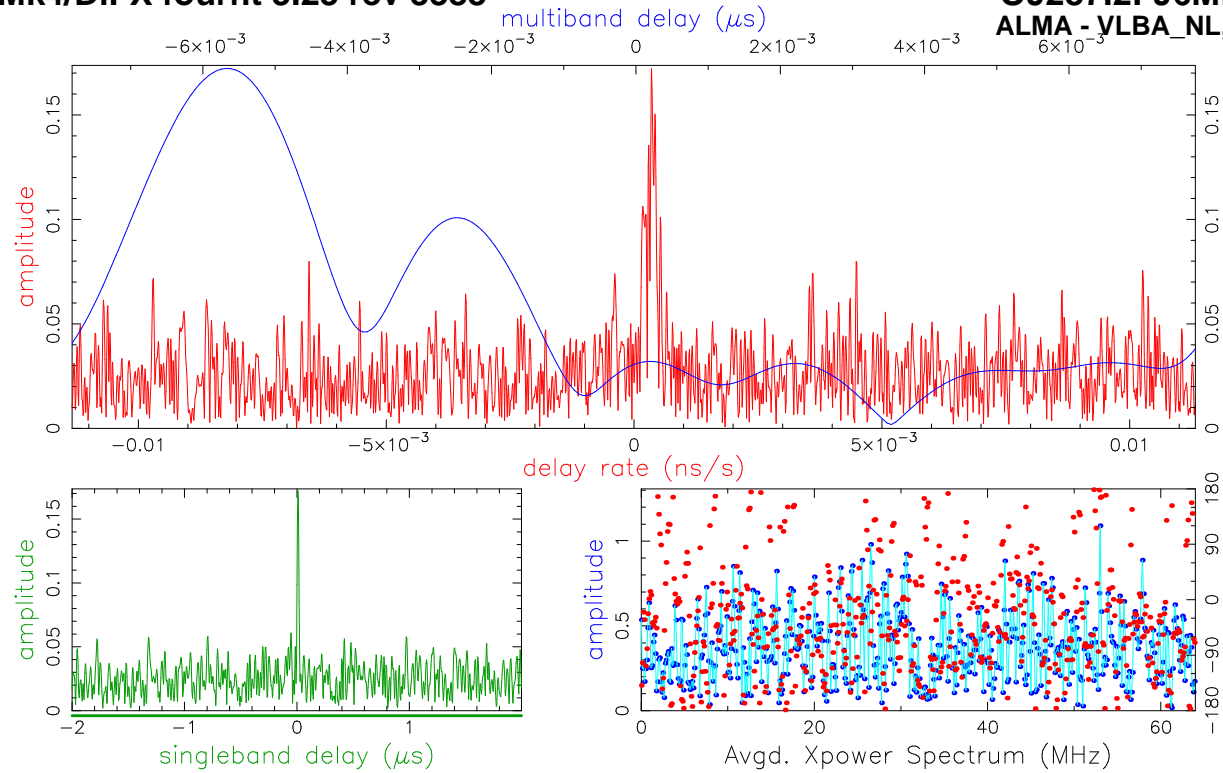
Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|------------------|----------|----------|--------------------|----------|----------|---|-------------------------------|
| | 164.4 | -162.7 | -123.7 | -120.3 | -176.3 | 164.6 | -154.8 | -139.6 | Phase | -157.7 |
| | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | Ampl. | 0.2 |
| | 788.4 | 689.2 | 514.2 | 513.7 | 514.0 | 514.5 | 514.4 | 517.9 | Sbd box | 514.3 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| n | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.14886389482E+04 | | | | | -1.14886443285E+04 | | | Resid mbdelay (usec) | 5.38033E-03 +/- 1.0E-04 |
| Sband delay (usec) | -1.14886392310E+04 | | | | | -2.1130918E+03 | | | Resid sbdelay (usec) | 5.09750E-03 +/- 8.3E-04 |
| Phase delay (usec) | -1.14886443336E+04 | | | | | -1.5300001E-06 | | | Resid phdelay (usec) | -5.08636E-06 +/- 3.6E-07 |
| Delay rate (us/s) | -5.46156593444E-01 | | | | | -5.46156946889E-01 | | | Resid rate (us/s) | 3.53446E-07 +/- 2.1E-09 |
| Total phase (deg) | | | -323.2 | | | 9.10179640400E-06 | | | Resid phase (deg) | -157.7 +/- 11.1 |
| | | | | | | | | | PCal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 |
| ph/seg (deg) | 64.3 | 26.5 | Search (2048X32) | 0.216 | | | | | PCal rate: 0.000E+00, 0.000E+00 (us/s) | sb window (us) -2.000 2.000 |
| amp/seg (%) | 94.1 | 46.3 | Interp. | 0.000 | | | | | Bits/sample: 2x2 | mb window (us) -0.008 0.008 |
| ph/frq (deg) | 32.0 | 15.6 | Inc. seg. avg. | 0.364 | | | | | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | dr window (ns/s) -0.011 0.011 |
| amp/frq (%) | 42.9 | 27.3 | Inc. frq. avg. | 0.237 | | | | | Data rate(Mb/s): 2048 | nlags: 512 t_cohere infinite |
| | | | | | | | | | | ion window (TEC) 0.00 0.00 |

A: az 307.1 el 24.6 pa 128.6 n: az 234.3 el 58.7 pa 39.9 u,v (fr/asec) 3351.072 -8527.464 simultaneous interpolator

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/An..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/An.W.31.2FJ6ME

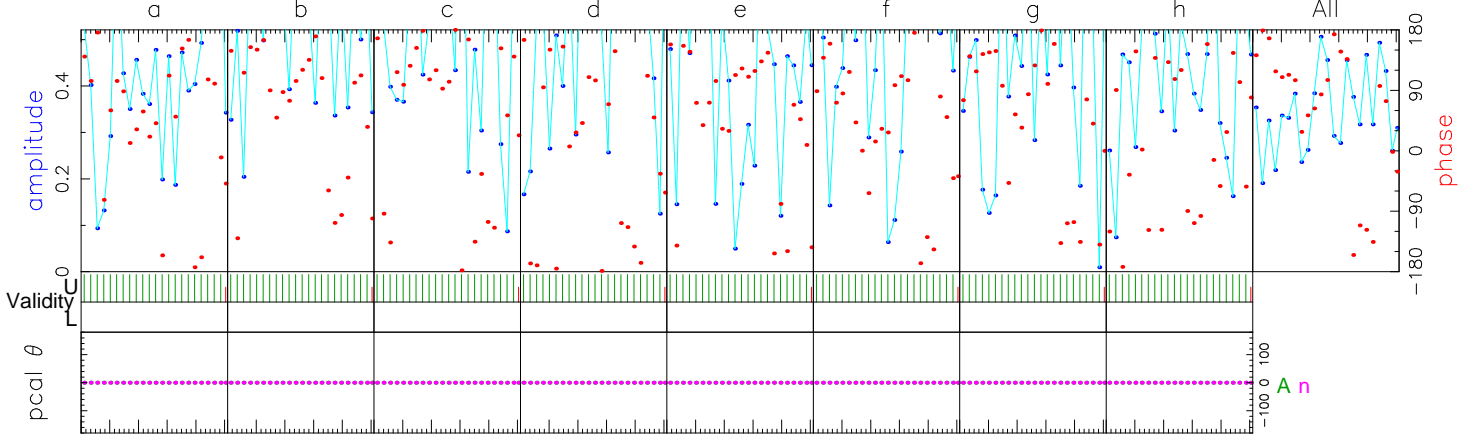


Fringe quality 9

SNR 8.2
Int time 299.975
Amp 0.174
Phase 121.7
PFD 1.4e-07
Delays (us)
SBD 0.008985
MBD -0.005632
Fringe rate (Hz) 0.030114
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080631
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

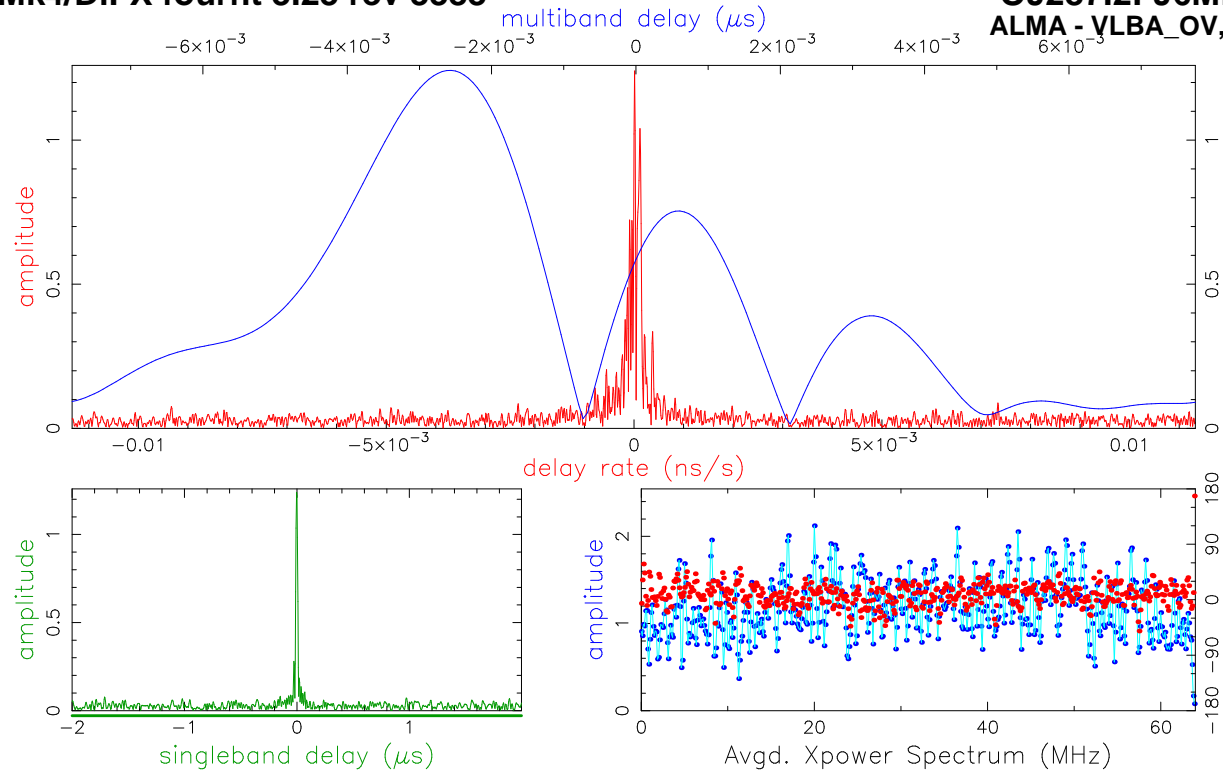
Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|---|--------------------|----------|----------|----------|----------|----------|----------|----------|------------|-----|
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A:n | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| n | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | | |
| n | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec) (SBD) | -1.14886343354E+04 | | | | | | | | | |
| Sband delay (usec) | -1.14886353433E+04 | | | | | | | | | |
| Phase delay (usec) | -1.14886443246E+04 | | | | | | | | | |
| Delay rate (us/s) | -5.46156597291E-01 | | | | | | | | | |
| Total phase (deg) | | | -43.8 | | | | | | | |
| Apriori delay (usec) | | | | | | | | | | |
| Apriori clock (usec) | | | | | | | | | | |
| Apriori clockrate (us/s) | | | | | | | | | | |
| Apriori rate (us/s) | | | | | | | | | | |
| Apriori accel (us/s/s) | | | | | | | | | | |
| Resid mbdelay (usec) | | | | | | | | | | |
| Resid sbdelay (usec) | | | | | | | | | | |
| Resid phdelay (usec) | | | | | | | | | | |
| Resid rate (us/s) | | | | | | | | | | |
| Resid phase (deg) | | | | | | | | | | |
| Pcal mode: MANUAL, MANUAL | | | | | | | | | | |
| Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | | | | | | | | | |
| Bits/sample: 2x2 | | | | | | | | | | |
| Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| nlags: 512 t_cohere infinite | | | | | | | | | | |
| sb window (us) | | | | | | | | | | |
| mb window (us) | | | | | | | | | | |
| dr window (ns/s) | | | | | | | | | | |
| ion window (TEC) | | | | | | | | | | |
| pcal θ | | | | | | | | | | |
| Amplitude | 0.174 +/- 0.021 | | | | | | | | | |
| Search (2048X32) | 0.168 | | | | | | | | | |
| Interp. | 0.000 | | | | | | | | | |
| Inc. seg. avg. | 0.298 | | | | | | | | | |
| Inc. frq. avg. | 0.185 | | | | | | | | | |
| PC period (AP's) 5, 5 | | | | | | | | | | |
| SampCntNorm: enabled | | | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | |

A: az 307.1 el 24.6 pa 128.6 n: az 234.3 el 58.7 pa 39.9 u,v (fr/asec) 3351.072 -8527.464

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/An..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/An.W.32.2FJ6ME

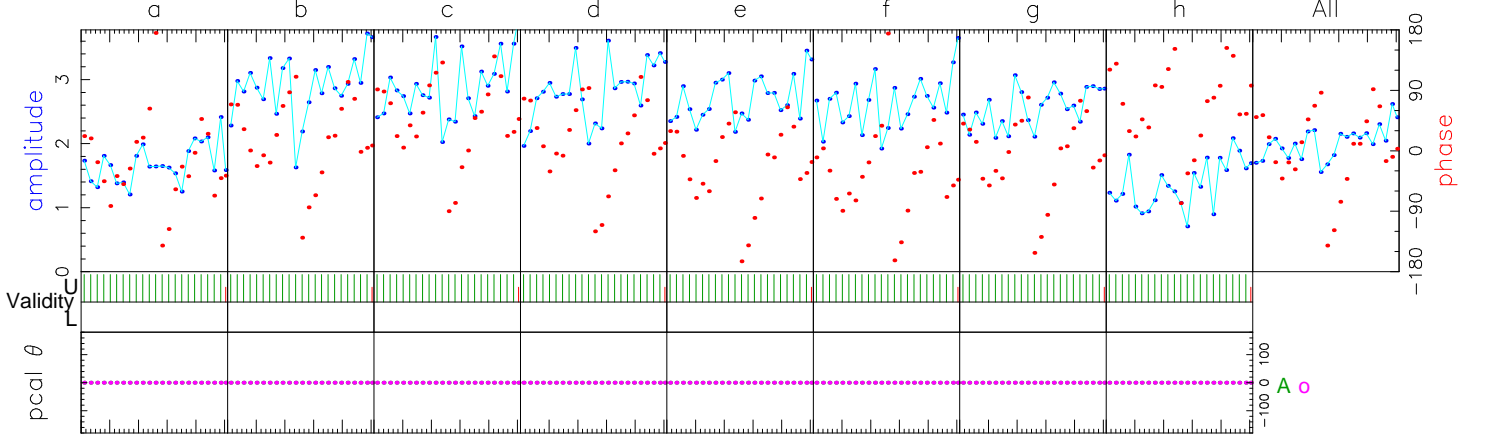


Fringe quality 2

SNR 59.6
Int time 299.973
Amp 1.259
Phase 10.2
PFD 0.0e+00
Delays (us)
SBD -0.002315
MBD -0.002506
Fringe rate (Hz)
0.001370
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

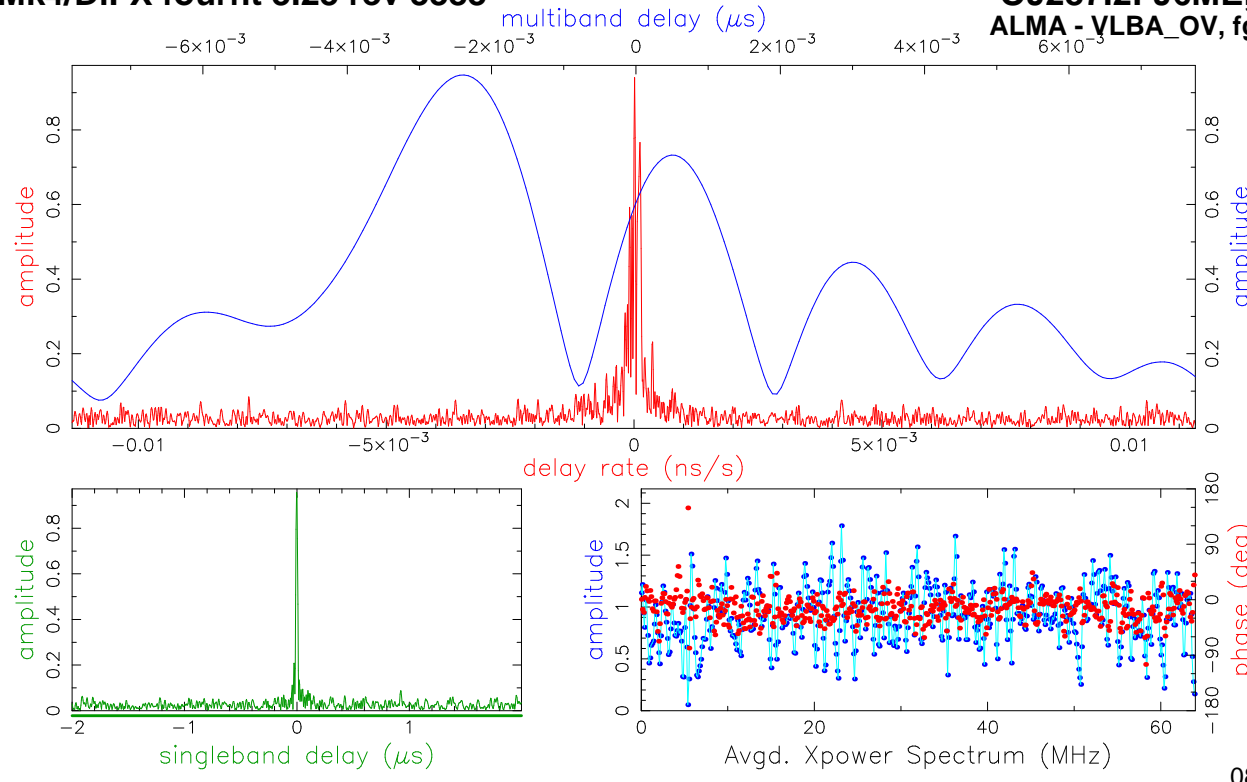
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080532
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All | | | | |
|--------------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|--------------------------|--------------------|----------------------|--------------|-----|---------|
| | -22.0 | 22.3 | 54.7 | 22.0 | -14.7 | -38.4 | -0.4 | 78.5 | Phase | 10.2 | | | | |
| | 1.0 | 1.8 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 0.8 | Ampl. | 1.5 | | | | |
| | 514.3 | 512.2 | 512.0 | 512.2 | 512.4 | 512.2 | 512.9 | 514.7 | Sbd box | 512.4 | | | | |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | | | | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | | | | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | | | | | |
| A:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | | | | | |
| A:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | | | | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | | | | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | | | | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | | | | | |
| o | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | | | | | |
| | | | | | | | | | Chan ids | | | | | |
| | | | | | | | | | Tracks | | | | | |
| Group delay (usec) (SBD) | -1.37181461050E+04 | | | | | | | | Apriori delay (usec) | -1.37181435990E+04 | Resid mbdelay (usec) | -2.50597E-03 | +/- | 1.8E-05 |
| Sband delay (usec) | -1.37181459135E+04 | | | | | | | | Apriori clock (usec) | -2.1113521E+03 | Resid sbdelay (usec) | -2.31450E-03 | +/- | 1.4E-04 |
| Phase delay (usec) | -1.37181435987E+04 | | | | | | | | Apriori clockrate (us/s) | -1.3300000E-06 | Resid phdelay (usec) | 3.28675E-07 | +/- | 6.2E-08 |
| Delay rate (us/s) | -1.03322936909E+00 | | | | | | | | Apriori rate (us/s) | -1.03322938500E+00 | Resid rate (us/s) | 1.59078E-08 | +/- | 3.6E-10 |
| Total phase (deg) | | | -213.2 | | | | | | Apriori accel (us/s/s) | 2.33246258796E-05 | Resid phase (deg) | 10.2 | +/- | 1.9 |

ph/seg (deg) 59.9 4.6 Search (2048X32) 1.191 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.9 8.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 43.0 2.7 Inc. seg. avg. 2.006 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.0 4.7 Inc. frq. avg. 1.488 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 o: az 180.1 el 72.8 pa 0.8 u,v (fr/asec) 6331.776 -7618.507 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ao..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ao.W.11.2FJ6ME

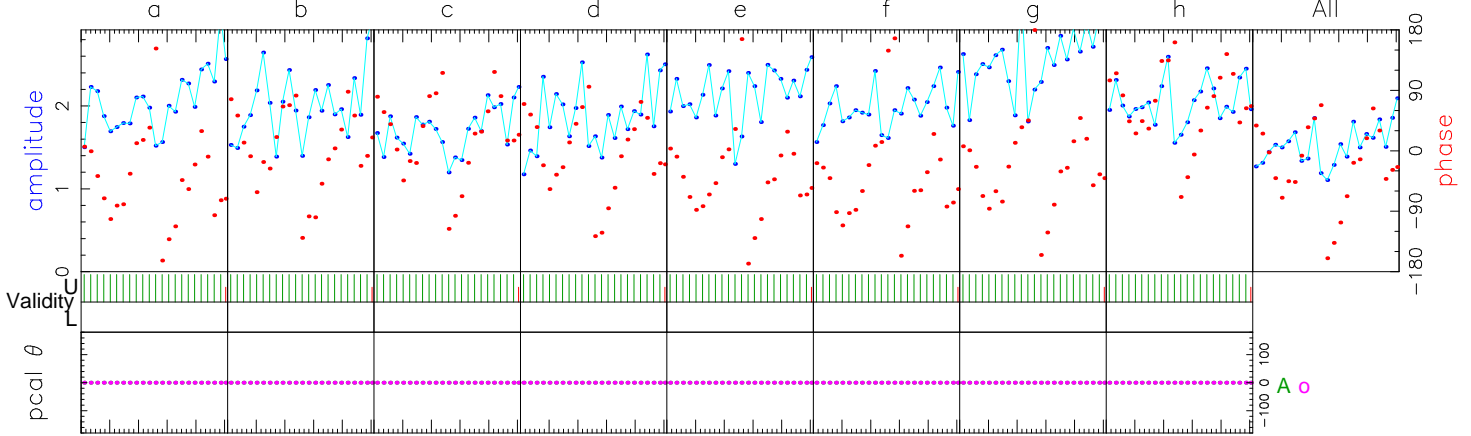


Fringe quality 4

SNR 46.1
Int time 299.973
Amp 0.973
Phase -12.9
PFD 0.0e+00
Delays (us)
SBD -0.002318
MBD -0.002535
Fringe rate (Hz) 0.001412
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080538
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

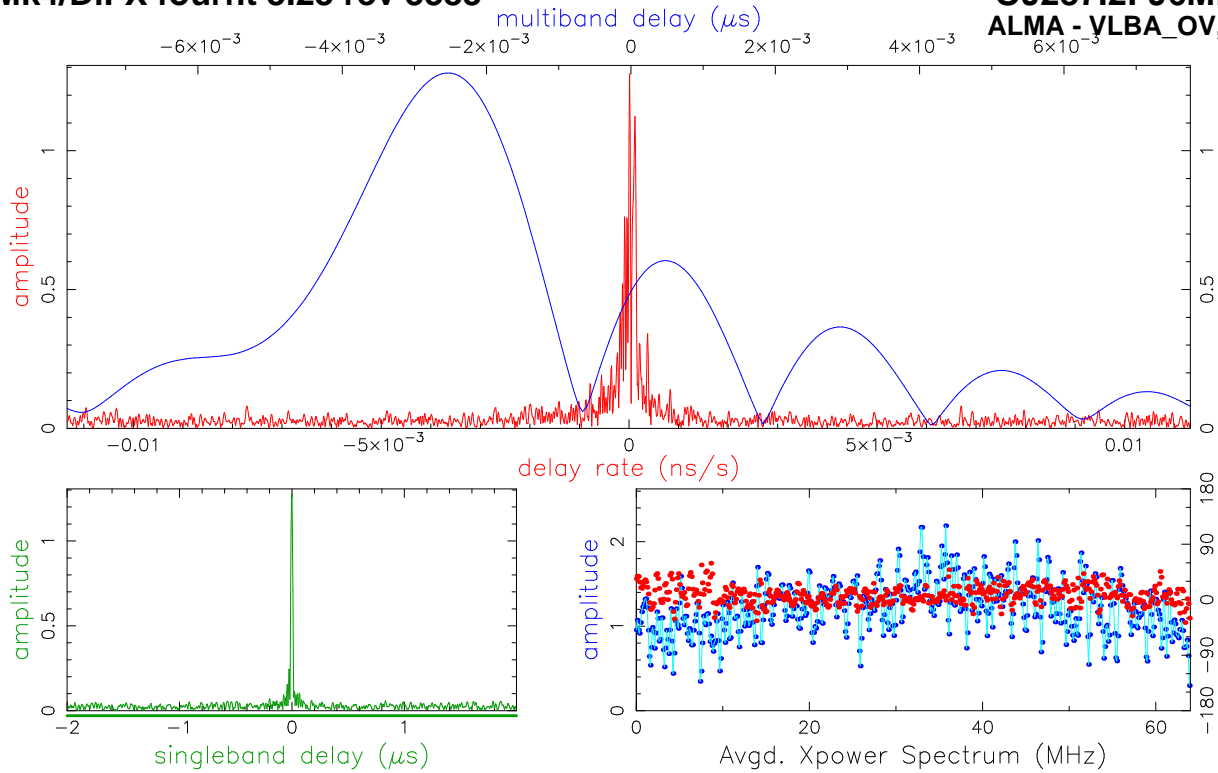


| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -46.3 | 5.9 | 32.9 | 2.8 | -45.9 | -57.4 | -29.9 | 73.7 | Phase | -12.9 |
| | 1.2 | 1.2 | 1.0 | 1.1 | 1.4 | 1.2 | 1.6 | 1.3 | Ampl. | 1.2 |
| | 514.3 | 512.0 | 511.9 | 512.3 | 512.4 | 512.4 | 512.9 | 514.6 | Sbd box | 512.4 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| o | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Chan ids | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37181461345E+04 | | Apriori delay (usec) | | -1.37181435990E+04 | | Resid mbdelay (usec) | | -2.53547E-03 | +/- 2.4E-05 |
| Sband delay (usec) | -1.37181459173E+04 | | Apriori clock (usec) | | -2.1113521E+03 | | Resid sbdelay (usec) | | -2.31825E-03 | +/- 1.9E-04 |
| Phase delay (usec) | -1.37181435994E+04 | | Apriori clockrate (us/s) | | -1.3300000E-06 | | Resid phdelay (usec) | | -4.15738E-07 | +/- 8.0E-08 |
| Delay rate (us/s) | -1.03322936860E+00 | | Apriori rate (us/s) | | -1.03322938500E+00 | | Resid rate (us/s) | | 1.63974E-08 | +/- 4.6E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.33246258796E-05 | | Resid phase (deg) | | -12.9 | +/- 2.5 |

ph/seg (deg) 60.2 6.0 Search (2048X32) 0.909 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.1 10.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 49.4 3.5 Inc. seg. avg. 1.514 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.0 6.1 Inc. frq. avg. 1.248 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 307.1 el 24.6 pa 128.6 o: az 180.1 el 72.8 pa 0.8 u,v (fr/asec) 6331.776 -7618.507 simultaneous interpolator

Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ao..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ao.W.18.2FJ6ME

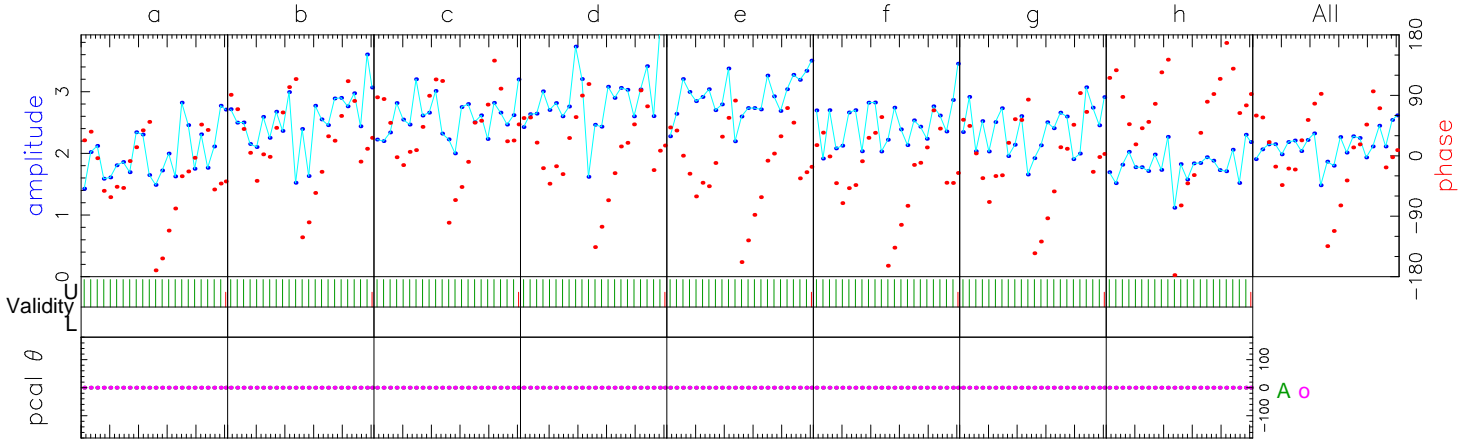


Fringe quality 2

SNR 61.9
Int time 299.973
Amp 1.307
Phase 14.2
PFD 0.0e+00
Delays (us)
SBD -0.002029
MBD -0.002631
Fringe rate (Hz)
0.001245
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

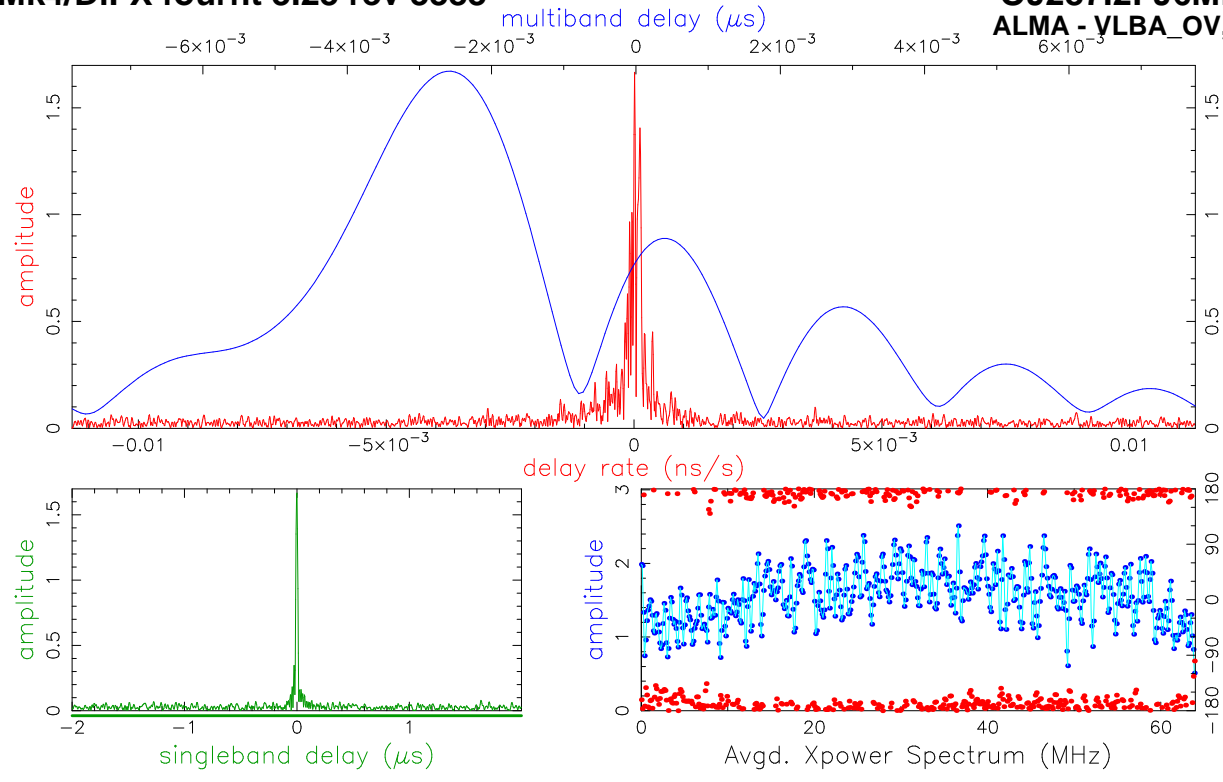
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080543
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -19.2 | 32.3 | 42.6 | 17.1 | -6.5 | -14.7 | 6.0 | 82.4 | Phase | 14.2 |
| | 1.3 | 1.5 | 1.5 | 1.7 | 1.8 | 1.5 | 1.4 | 1.0 | Ampl. | 1.5 |
| | 513.9 | 512.3 | 511.9 | 512.2 | 512.6 | 512.3 | 512.5 | 514.1 | Sbd box | 512.5 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37181462304E+04 | | Apriori delay (usec) | | -1.37181435990E+04 | | Resid mbdelay (usec) | | -2.63140E-03 | +/- 1.8E-05 |
| Sband delay (usec) | -1.37181456278E+04 | | Apriori clock (usec) | | -2.1113521E+03 | | Resid sbdelay (usec) | | -2.02875E-03 | +/- 1.4E-04 |
| Phase delay (usec) | -1.37181435986E+04 | | Apriori clockrate (us/s) | | -1.3300000E-06 | | Resid phdelay (usec) | | 4.58751E-07 | +/- 6.0E-08 |
| Delay rate (us/s) | -1.03322937054E+00 | | Apriori rate (us/s) | | -1.03322938500E+00 | | Resid rate (us/s) | | 1.44517E-08 | +/- 3.4E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.33246258796E-05 | | Resid phase (deg) | | 14.2 | +/- 1.9 |

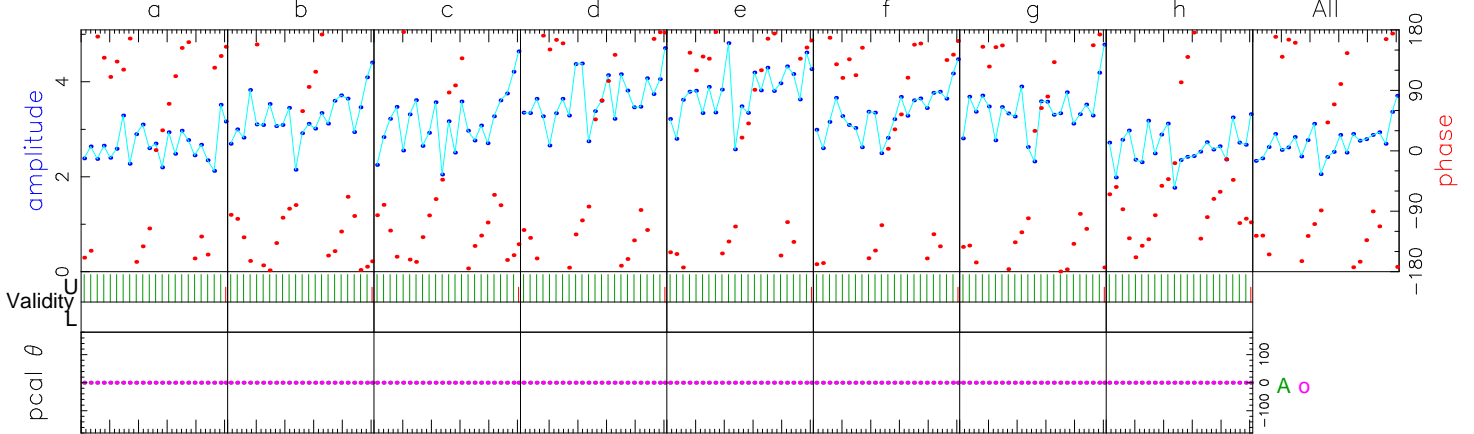
ph/seg (deg) 60.6 4.4 Search (2048X32) 1.253 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.5 7.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 37.1 2.6 Inc. seg. avg. 2.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.5 4.6 Inc. frq. avg. 1.453 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 o: az 180.1 el 72.8 pa 0.8 u,v (fr/asec) 6331.776 -7618.507 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ao..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ao.W.23.2FJ6ME simultaneous interpolator



Fringe quality 2

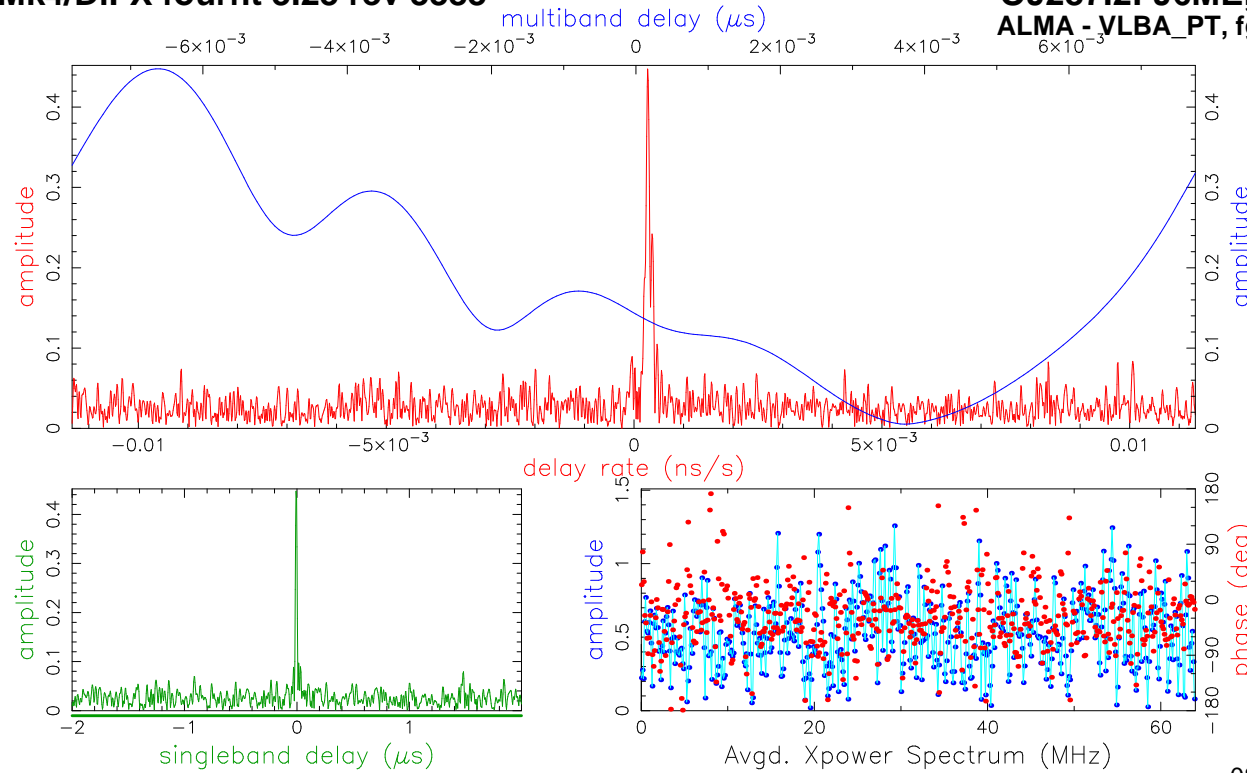
SNR 80.4
Int time 299.973
Amp 1.698
Phase -166.4
PFD 0.0e+00
Delays (us)
SBD -0.001809
MBD -0.002685
Fringe rate (Hz) 0.001305
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080527
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A:o | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| o | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | | |
| o | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec) (SBD) | -1.37181462840E+04 | -1.37181454080E+04 | -1.37181436044E+04 | -1.03322936984E+00 | -29.8 | -1.37181435990E+04 | -2.1113521E+03 | -1.3300000E-06 | -1.37181435990E+04 | -1.37181435990E+04 |
| Sband delay (usec) | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 |
| Phase delay (usec) | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 | -1.37181435990E+04 |
| Delay rate (us/s) | -1.03322936984E+00 | -1.03322936984E+00 | -1.03322936984E+00 | -1.03322936984E+00 | -1.03322936984E+00 | -1.03322936984E+00 | -1.03322936984E+00 | -1.03322936984E+00 | -1.03322936984E+00 | -1.03322936984E+00 |
| Total phase (deg) | | | | | | | | | | |
| 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 | | | | | | | | | | |
| Data rate(MSamp/s): 128 MBbps 32 Amb 0.016 us | | | | | | | | | | |
| Data rate(Mb/s): 2048 | | | | | | | | | | |
| nlags: 512 t_cohere infinite | | | | | | | | | | |
| sb window (us) | -2.000 | 2.000 | | | | | | | | |
| mb window (us) | -0.008 | 0.008 | | | | | | | | |
| dr window (ns/s) | -0.011 | 0.011 | | | | | | | | |
| ion window (TEC) | 0.00 | 0.00 | | | | | | | | |
| simultaneous interpolator | | | | | | | | | | |

A: az 307.1 el 24.6 pa 128.6 o: az 180.1 el 72.8 pa 0.8 u,v (fr/asec) 6331.776 -7618.507
Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ao..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ao.W.4.2FJ6ME

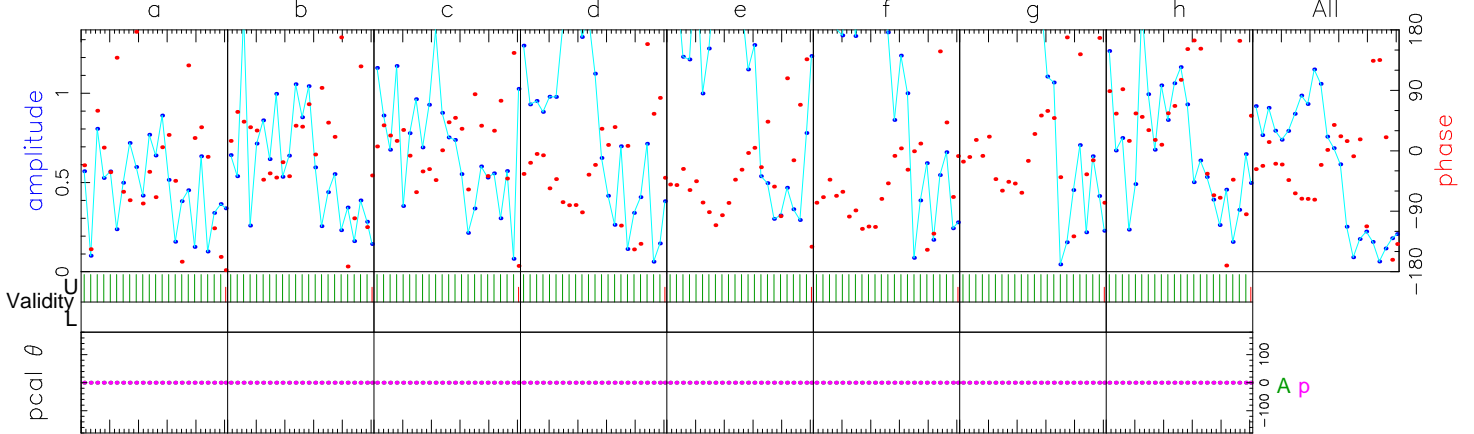


Fringe quality 7

SNR 21.4
Int time 299.973
Amp 0.452
Phase -29.8
PFD 0.0e+00
Delays (us)
SBD -0.006569
MBD -0.006555
Fringe rate (Hz) 0.023837
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080517
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



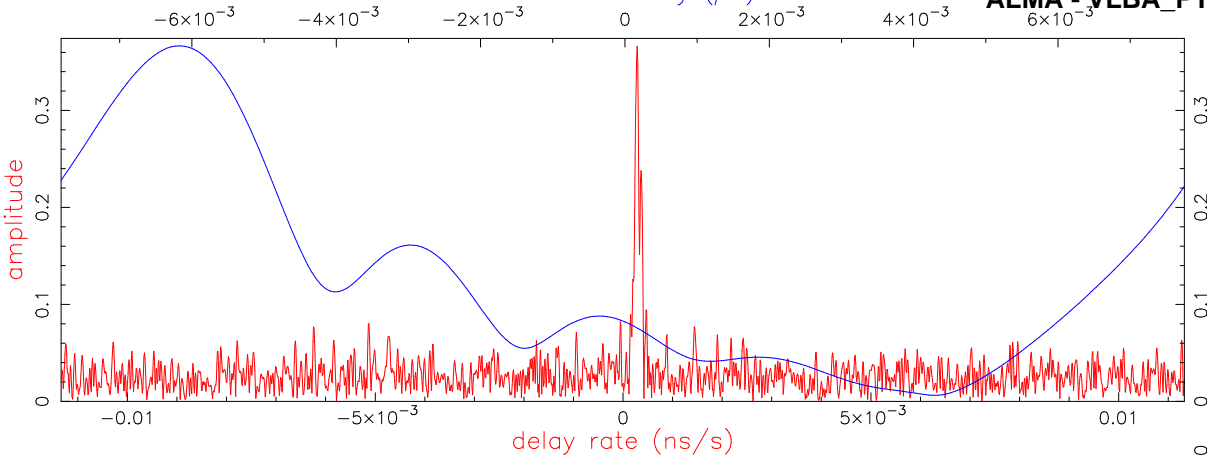
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -27.9 | 18.0 | 2.4 | -50.4 | -54.9 | -74.6 | -14.3 | 65.7 | Phase | -29.8 |
| | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.9 | 0.4 | Ampl. | 0.6 |
| | 900.0 | 511.0 | 511.0 | 511.5 | 511.9 | 511.6 | 511.8 | 514.2 | Sbd box | 511.3 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| p | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37258472524E+04 | | Apriori delay (usec) | | -1.37258406973E+04 | | Resid mbdelay (usec) | | -6.55512E-03 | +/- 5.1E-05 |
| Sband delay (usec) | -1.37258472663E+04 | | Apriori clock (usec) | | -2.1131223E+03 | | Resid sbdelay (usec) | | -6.56900E-03 | +/- 4.0E-04 |
| Phase delay (usec) | -1.37258406983E+04 | | Apriori clockrate (us/s) | | -1.1100000E-06 | | Resid phdelay (usec) | | -9.60395E-07 | +/- 1.7E-07 |
| Delay rate (us/s) | -8.20303331411E-01 | | Apriori rate (us/s) | | -8.20303608136E-01 | | Resid rate (us/s) | | 2.76725E-07 | +/- 1.0E-09 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.49551183741E-05 | | Resid phase (deg) | | -29.8 | +/- 5.4 |

| | RMS | Theor. | Amplitude | 0.452 +/- 0.021 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | sb window (us) | -2.000 2.000 |
|--------------|------|--------|------------------|-----------------|---|------------------------------|------------------|--------------|
| ph/seg (deg) | 69.5 | 12.8 | Search (2048X32) | 0.444 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | mb window (us) | -0.008 0.008 |
| amp/seg (%) | 84.8 | 22.4 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | dr window (ns/s) | -0.011 0.011 |
| ph/frq (deg) | 51.2 | 7.6 | Inc. seg. avg. | 0.579 | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | nlags: 512 t_cohere infinite | ion window (TEC) | 0.00 0.00 |
| amp/frq (%) | 62.8 | 13.2 | Inc. frq. avg. | 0.566 | Data rate(Mb/s): 2048 | | | |

A: az 307.1 el 24.6 pa 128.6 p: az 214.9 el 73.1 pa 31.5 u,v (fr/asec) 5034.678 -7224.503 simultaneous interpolator

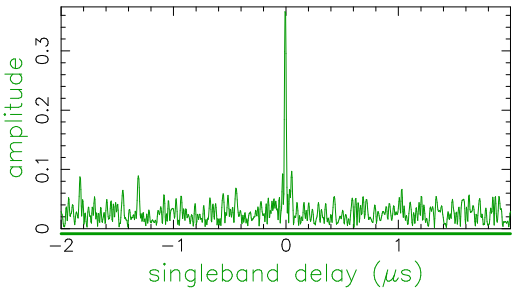
Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ap..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ap.W.1.2FJ6ME

multiband delay (μ s)

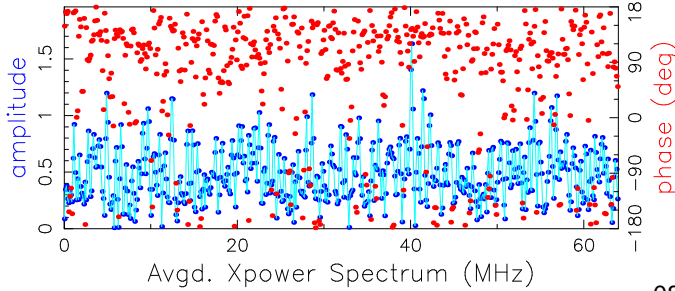


Fringe quality 7

SNR 17.7
Int time 299.973
Amp 0.374
Phase 127.5
PFD 0.0e+00
Delays (us)
SBD -0.005967
MBD -0.006092
Fringe rate (Hz) 0.024854
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

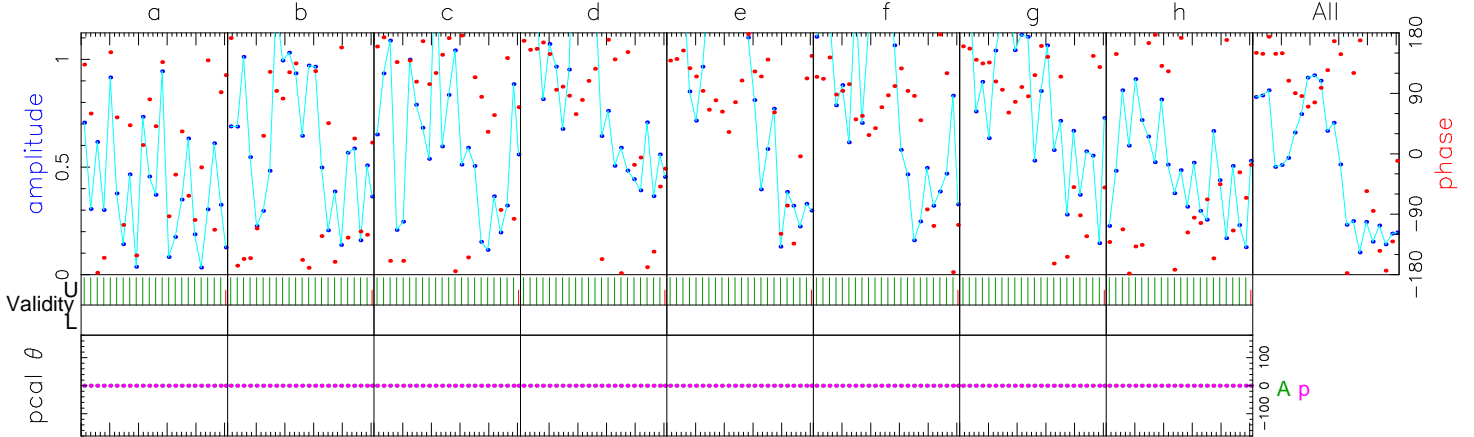


delay rate (ns/s)



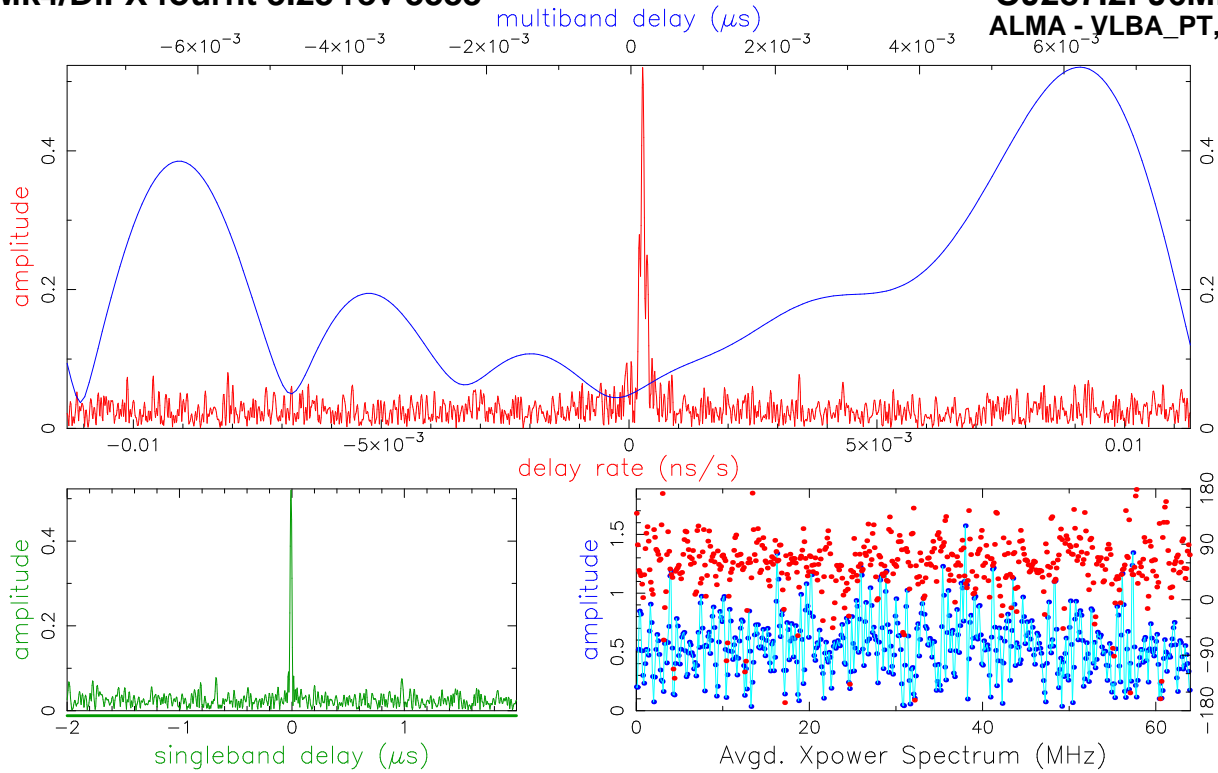
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080533
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|-----------------------------|----------|-------------------------------|----------|-----------------------------|----------|----------|----------|--------------|-------------|
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | | |
| p | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | | |
| Group delay (usec) (SBD) | -1.37258467898E+04 | | | | | | | | | |
| Sband delay (usec) | -1.37258466646E+04 | | | | | | | | | |
| Phase delay (usec) | -1.37258406932E+04 | | | | | | | | | |
| Delay rate (us/s) | -8.20303319602E-01 | | | | | | | | | |
| Total phase (deg) | | | -112.2 | | | | | | | |
| Apriori delay (usec) | | | | | -1.37258406973E+04 | | | | | |
| Apriori clock (usec) | | | | | -2.1131223E+03 | | | | | |
| Apriori clockrate (us/s) | | | | | -1.1100000E-06 | | | | | |
| Apriori rate (us/s) | | | | | -8.20303608136E-01 | | | | | |
| Apriori accel (us/s/s) | | | | | 2.49551183741E-05 | | | | | |
| Resid mbdelay (usec) | | | | | | | | | -6.09249E-03 | +/- 6.1E-05 |
| Resid sbdelay (usec) | | | | | | | | | -5.96725E-03 | +/- 4.9E-04 |
| Resid phdelay (usec) | | | | | | | | | 4.11065E-06 | +/- 2.1E-07 |
| Resid rate (us/s) | | | | | | | | | 2.88534E-07 | +/- 1.2E-09 |
| Resid phase (deg) | | | | | | | | | 127.5 | +/- 6.5 |
| Pcal mode: | MANUAL, MANUAL | | PC period (AP's) 5, 5 | | | | | | | |
| Pcal rate: | 0.000E+00, 0.000E+00 (us/s) | | sb window (us) -2.000 2.000 | | | | | | | |
| Bits/sample: | 2x2 | | SampCntNorm: enabled | | mb window (us) -0.008 0.008 | | | | | |
| Data rate(MSamp/s): | 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) -0.011 0.011 | | | | | | | |
| Data rate(Mb/s): | 2048 | | nlags: 512 t_cohere infinite | | ion window (TEC) 0.00 0.00 | | | | | |

ph/seg (deg) 68.6 15.5 Search (2048X32) 0.365 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 85.6 27.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
ph/frq (deg) 42.3 9.1 Inc. seg. avg. 0.503 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 47.8 16.0 Inc. frq. avg. 0.427 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
A: az 307.1 el 24.6 pa 128.6 p: az 214.9 el 73.1 pa 31.5 u,v (fr/asec) 5034.678 -7224.503 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ap..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ap.W.13.2FJ6ME simultaneous interpolator

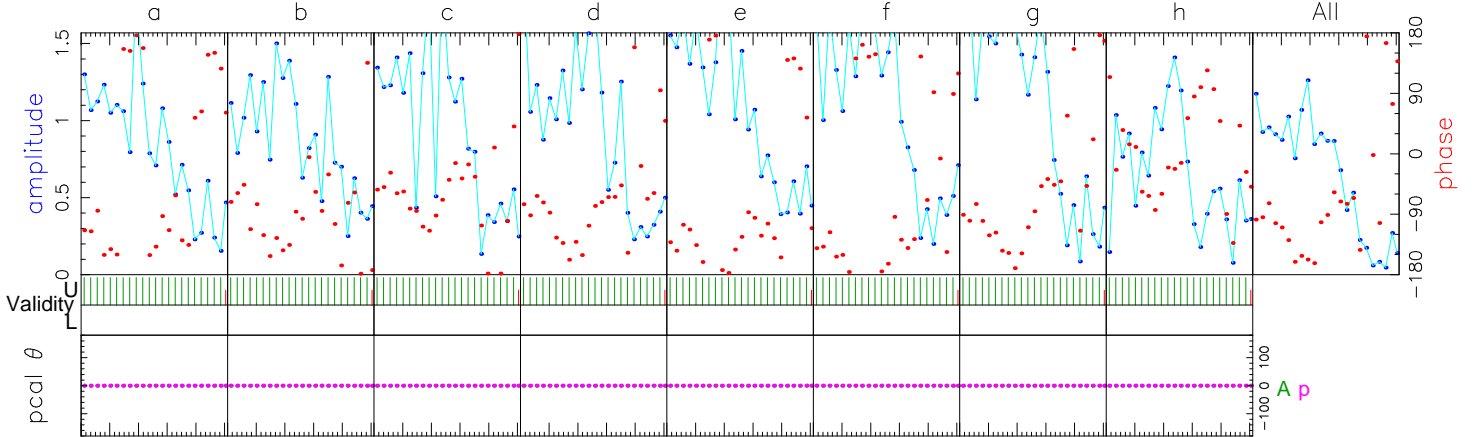


Fringe quality 5

SNR 24.8
Int time 299.973
Amp 0.523
Phase -111.3
PFD 0.0e+00
Delays (us)
SBD -0.008791
MBD 0.006161
Fringe rate (Hz) 0.024293
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

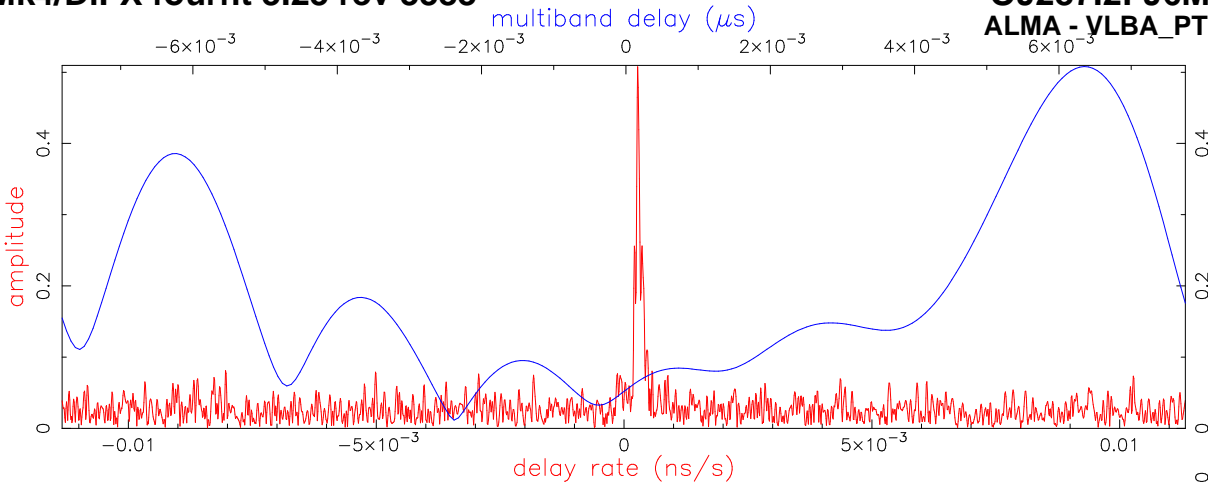
Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080522
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



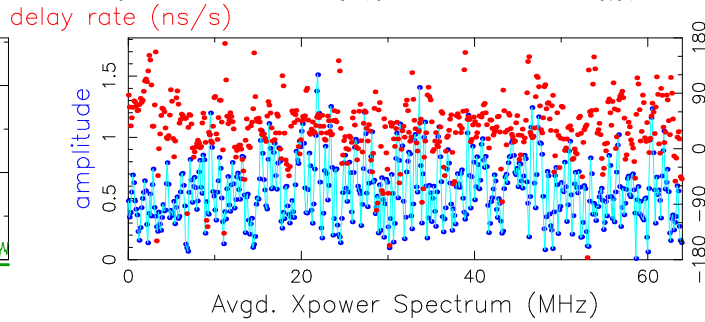
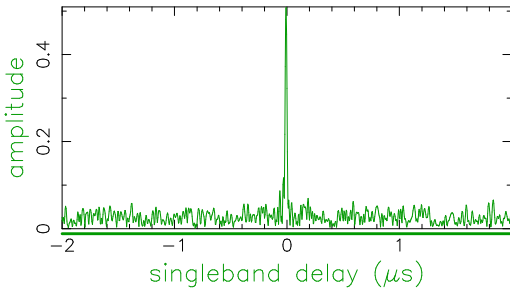
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -149.1 | -97.5 | -60.8 | -94.3 | -144.7 | -163.4 | -105.9 | -11.3 | Phase | -111.3 |
| | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.4 | Ampl. | 0.7 |
| | 512.5 | 510.6 | 510.5 | 510.6 | 510.5 | 510.4 | 511.4 | 513.3 | Sbd box | 510.7 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UY | W01UY | W02UY | W03UY | W04UY | W05UY | W06UY | W07UY | Chan ids | |
| p | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37258501618E+04 | | Apriori delay (usec) | | -1.37258406973E+04 | | Resid mbdelay (usec) | | 6.16054E-03 | +/- 4.4E-05 |
| Sband delay (usec) | -1.37258494888E+04 | | Apriori clock (usec) | | -2.1131223E+03 | | Resid sbdelay (usec) | | -8.79150E-03 | +/- 3.5E-04 |
| Phase delay (usec) | -1.37258407009E+04 | | Apriori clockrate (us/s) | | -1.1100000E-06 | | Resid phdelay (usec) | | -3.58881E-06 | +/- 1.5E-07 |
| Delay rate (us/s) | -8.20303326116E-01 | | Apriori rate (us/s) | | -8.20303608136E-01 | | Resid rate (us/s) | | 2.82020E-07 | +/- 8.6E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.49551183741E-05 | | Resid phase (deg) | | -111.3 | +/- 4.6 |

ph/seg (deg) 60.4 11.1 Search (2048X32) 0.510 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.7 19.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 55.2 6.5 Inc. seg. avg. 0.655 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.1 11.4 Inc. frq. avg. 0.686 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 p: az 214.9 el 73.1 pa 31.5 u,v (fr/asec) 5034.678 -7224.503 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ap..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ap.W.2.2FJ6ME simultaneous interpolator



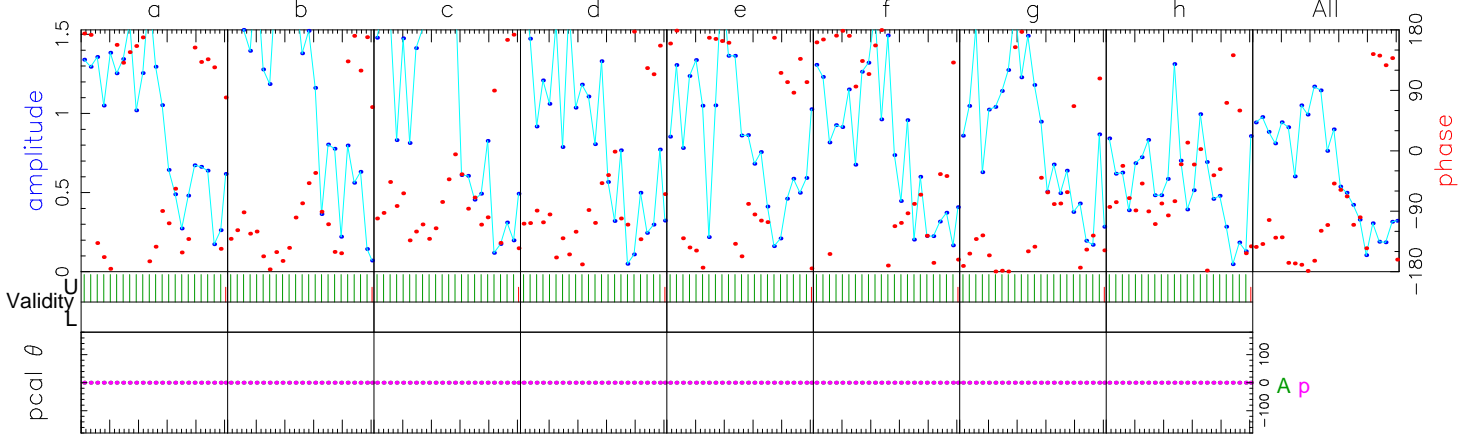
Fringe quality 6

SNR 24.1
Int time 299.973
Amp 0.510
Phase -137.0
PFD 0.0e+00
Delays (us)
SBD -0.008611
MBD 0.006307
Fringe rate (Hz)
0.023471
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211d
Exper # 16383
Yr:day 2021:117
Start 022800.00
Stop 023300.03
FRT 023030.00
Corr/FF/build
2022:297:190419
2022:298:080528
2022:122:205858
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|--------------------------|--------------------|----------|--------------------------|----------|--------------------|----------|----------------------|----------|--------------|-------------|
| | -178.7 | -127.0 | -87.1 | -116.9 | -170.2 | 177.5 | -155.7 | -62.5 | Phase | -137.0 |
| | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.4 | Ampl. | 0.6 |
| | 512.4 | 510.8 | 510.5 | 510.2 | 510.5 | 510.8 | 511.4 | 513.0 | Sbd box | 510.8 |
| U/L | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | 586/0 | APs used | |
| A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | PC freqs | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| A:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| A:p | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| A | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| p | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| A | W00UX | W01UX | W02UX | W03UX | W04UX | W05UX | W06UX | W07UX | Chan ids | |
| p | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Tracks | |
| | | | | | | | | | Tracks | |
| Group delay (usec) (SBD) | -1.37258500152E+04 | | Apriori delay (usec) | | -1.37258406973E+04 | | Resid mbdelay (usec) | | 6.30713E-03 | +/- 4.5E-05 |
| Sband delay (usec) | -1.37258493086E+04 | | Apriori clock (usec) | | -2.1131223E+03 | | Resid sbdelay (usec) | | -8.61125E-03 | +/- 3.6E-04 |
| Phase delay (usec) | -1.37258407017E+04 | | Apriori clockrate (us/s) | | -1.1100000E-06 | | Resid phdelay (usec) | | -4.41682E-06 | +/- 1.5E-07 |
| Delay rate (us/s) | -8.20303335665E-01 | | Apriori rate (us/s) | | -8.20303608136E-01 | | Resid rate (us/s) | | 2.72471E-07 | +/- 8.8E-10 |
| Total phase (deg) | | | Apriori accel (us/s/s) | | 2.49551183741E-05 | | Resid phase (deg) | | -137.0 | +/- 4.7 |

ph/seg (deg) 50.9 11.4 Search (2048X32) 0.502 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.7 19.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -2.000 2.000
 ph/frq (deg) 48.0 6.7 Inc. seg. avg. 0.660 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.6 11.7 Inc. frq. avg. 0.641 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 307.1 el 24.6 pa 128.6 p: az 214.9 el 73.1 pa 31.5 u,v (fr/asec) 5034.678 -7224.503 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_plain Input file: /Exps/c211d/v2/86ghz/1234/No0022/Ap..2FJ6ME Output file: /Exps/c211d/v2/86ghz/1234/No0022/Ap.W.6.2FJ6ME simultaneous interpolator