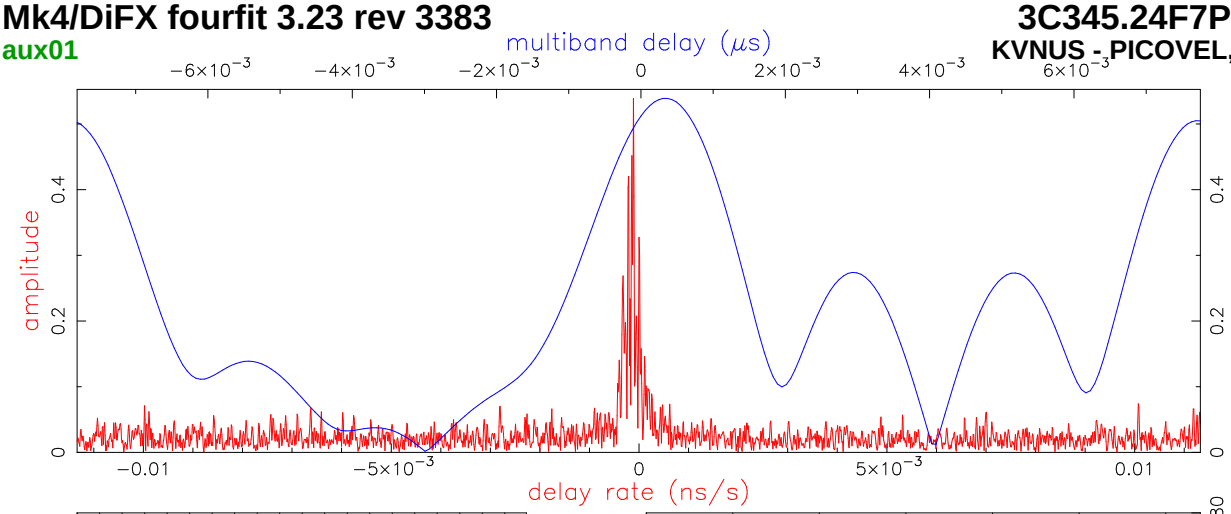
# Mk4/DiFX fourfit 3.23 rev 3383

**aux01**

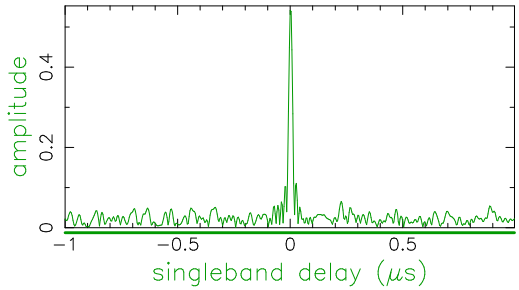
# 3C345.24F7P7, No0207, uP

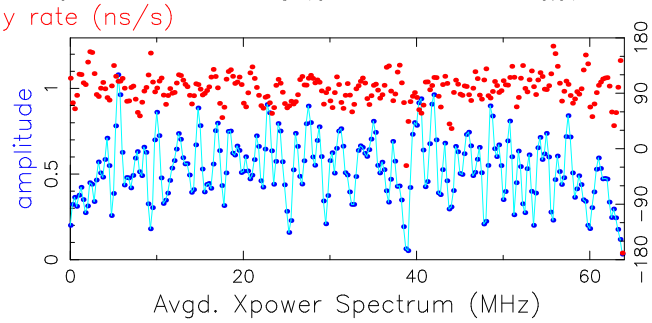
**KVNUS - PICOVEL, fgroup W, pol LL**



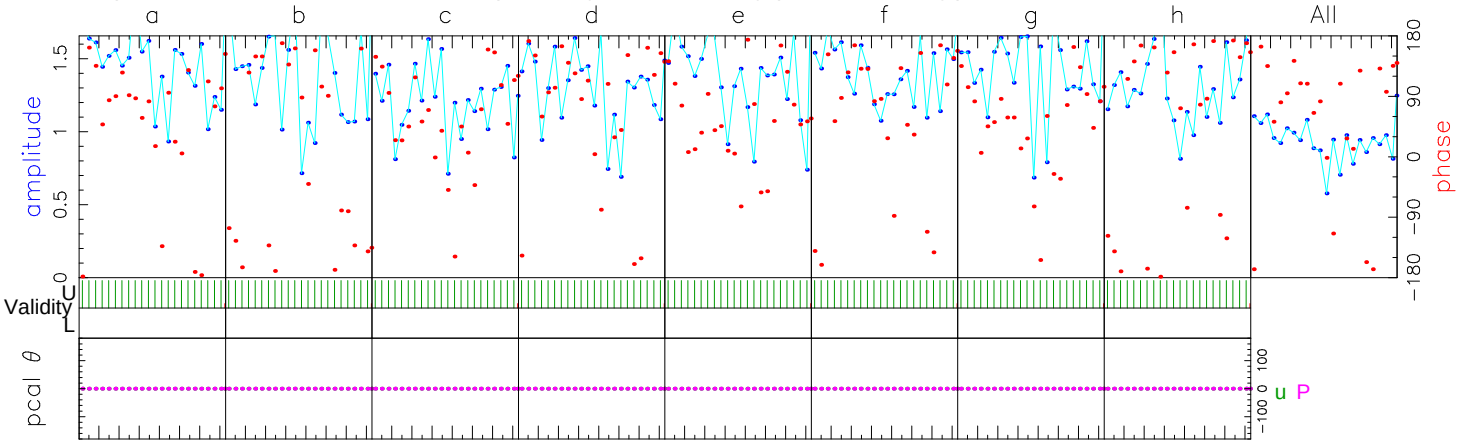

Fringe quality 4

| | |
|---|---|
| SNR | 31.0 |
| Int time | 419.822 |
| Amp | 0.553 |
| Phase | 116.7 |
| PFD | 0.0e+00 |
| Delays (us) | |
| SBD | 0.001873 |
| MBD | 0.000306 |
| Fringe rate (Hz) | -0.009312 |
| Ion TEC | 0.000 |
| Ref freq (MHz) | 86140.0000 |
| AP (sec) | 0.512 |
| Exp. | c212a |
| Exper # | 1234 |
| Yr:day | 2021:274 |
| Start | 101501.00 |
| Stop | 102200.84 |
| FRT | 101831.00 |
| Corr/FF/build | 2022:081:054223 2022:083:151710 2021:308:113728 |
| RA & Dec (J2000) | 16h42m58.809967s +39°48'36.993984" |




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




| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|---|---|---|---|---|---|---|---|---|---|---|
| | 103.8 | -179.0 | 73.5 | 136.7 | 55.8 | 133.0 | 63.5 | 170.8 | Phase | 116.7 |
| | 0.9 | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | Ampl. | 0.8 |
| | 257.9 | 258.1 | 257.5 | 258.1 | 258.0 | 257.7 | 258.0 | 258.4 | Sbd box | 257.5 |
| U/L | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | APs used | |
| u | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| u:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| u:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| u | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| u | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids Tracks | |
| P | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids Tracks | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group delay (usec) (SBD) | 9.24588693333E+03 | Apriori delay (usec) | 9.24588662721E+03 | Resid mbdelay (usec) | 3.06123E-04 | +/- | 3.5E-05 |
| Sband delay (usec) | 9.24588849996E+03 | Apriori clock (usec) | 5.7117939E+00 | Resid sbdelay (usec) | 1.87275E-03 | +/- | 2.8E-04 |
| Phase delay (usec) | 9.24588663097E+03 | Apriori clockrate (us/s) | 1.5290000E-06 | Resid phdelay (usec) | 3.76341E-06 | +/- | 1.2E-07 |
| Delay rate (us/s) | -1.61940762510E+00 | Apriori rate (us/s) | -1.61940751700E+00 | Resid rate (us/s) | -1.08100E-07 | +/- | 4.9E-10 |
| Total phase (deg) | 141.1 | Apriori accel (us/s/s) | -5.06964068329E-05 | Resid phase (deg) | 116.7 | +/- | 3.7 |

| | RMS | Theor. | Amplitude | 0.553 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | |
|---|---|---|---|---|---|---|---|---|
| ph/seg (deg) | 61.2 | 8.9 | Search (2048X32) | 0.524 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 72.3 | 15.5 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 52.1 | 5.2 | Inc. seg. avg. | 0.920 | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 39.3 | 9.1 | Inc. frq. avg. | 0.753 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) | 0.00 0.00 |

u: az 290.2 el 56.6 pa 83.3 P: az 56.2 el 22.4 pa -60.2 u,v (fr/asec) 11953.689 -3644.851 simultaneous interpolator

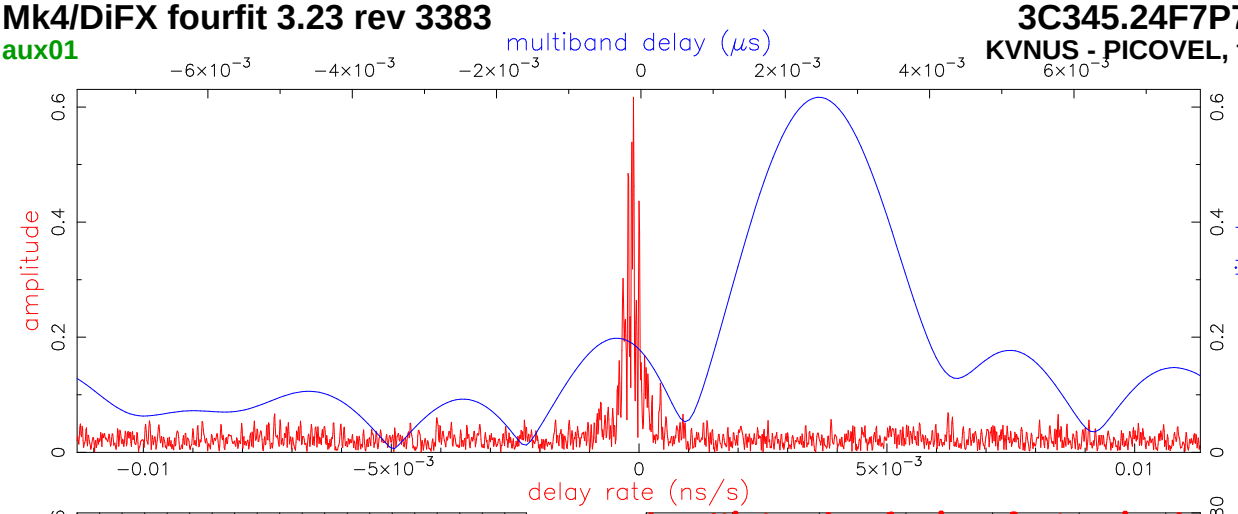
Control file: cf_1234_gmva Input file: /Exps/c212a/v1/3mm/1234/No0207/uP..24F7P7 Output file: /Exps/c212a/v1/3mm/1234/No0207/uP.W.61.24F7P7

# Mk4/DiFX fourfit 3.23 rev 3383

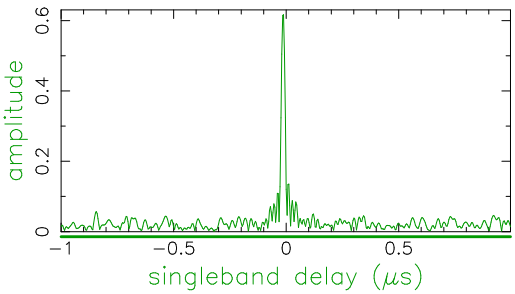
**aux01**

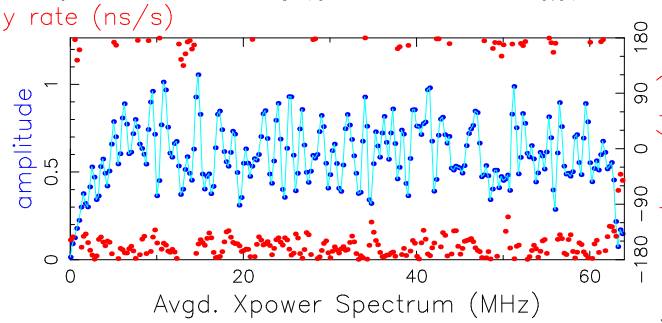
# 3C345.24F7P7, No0207, uP

**KVNUS - PICOVEL, fgroup W, pol RR**

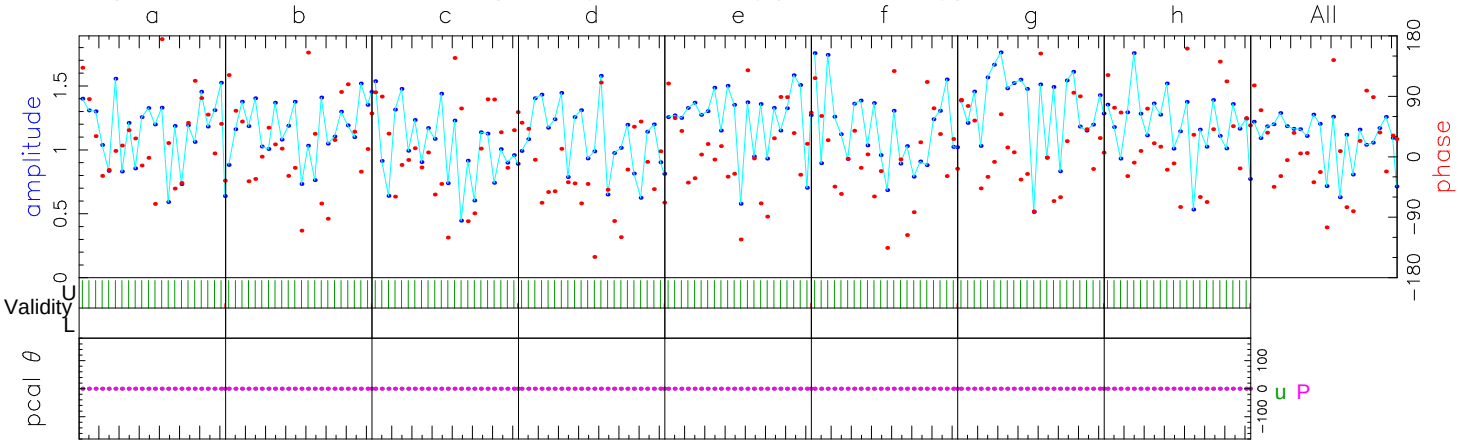



| | |
|---|---|
| Fringe quality | 6 |
| SNR | 35.3 |
| Int time | 419.822 |
| Amp | 0.631 |
| Phase | 11.0 |
| PFD | 0.0e+00 |
| Delays (us) | |
| SBD | -0.013598 |
| MBD | 0.002456 |
| Fringe rate (Hz) | -0.009273 |
| Ion TEC | 0.000 |
| Ref freq (MHz) | 86140.0000 |
| AP (sec) | 0.512 |
| Exp. | c212a |
| Exper # | 1234 |
| Yr:day | 2021:274 |
| Start | 101501.00 |
| Stop | 102200.84 |
| FRT | 101831.00 |
| Corr/FF/build | 2022:081:054223 2022:083:151715 2021:308:113728 |
| RA & Dec (J2000) | 16h42m58.809967s +39°48'36.993984" |




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




| | | | | | | | | | Freq (MHz) | All |
|---|---|---|---|---|---|---|---|---|---|---|
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Phase | 11.0 |
| | 28.5 | 13.0 | 9.0 | -27.2 | 10.5 | 8.0 | 16.9 | 24.2 | Ampl. | 0.6 |
| | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.6 | 0.8 | 0.6 | Sbd box | 253.5 |
| | 253.4 | 253.4 | 253.1 | 253.3 | 253.9 | 253.1 | 253.6 | 254.0 | APs used | |
| U/L | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | PC freqs | |
| u | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC phase | |
| u:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| u:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC amp | |
| u | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| u | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids Tracks | |
| P | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids Tracks | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group delay (usec) (SBD) | 9.24587345852E+03 | Apriori delay (usec) | 9.24588662721E+03 | Resid mbdelay (usec) | 2.45631E-03 | +/- | 3.1E-05 |
| Sband delay (usec) | 9.24587302921E+03 | Apriori clock (usec) | 5.7117939E+00 | Resid sbdelay (usec) | -1.35980E-02 | +/- | 2.4E-04 |
| Phase delay (usec) | 9.24588662756E+03 | Apriori clockrate (us/s) | 1.5290000E-06 | Resid phdelay (usec) | 3.55329E-07 | +/- | 1.0E-07 |
| Delay rate (us/s) | -1.61940762465E+00 | Apriori rate (us/s) | -1.61940751700E+00 | Resid rate (us/s) | -1.07646E-07 | +/- | 4.3E-10 |
| Total phase (deg) | 35.4 | Apriori accel (us/s/s) | -5.06964068329E-05 | Resid phase (deg) | 11.0 | +/- | 3.2 |

| | RMS | Theor. | Amplitude | 0.631 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | |
|---|---|---|---|---|---|---|---|---|
| ph/seg (deg) | 62.0 | 7.8 | Search (2048X32) | 0.600 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 80.2 | 13.6 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 18.2 | 4.6 | Inc. seg. avg. | 1.096 | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 13.8 | 8.0 | Inc. frq. avg. | 0.638 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) | 0.00 0.00 |

u: az 290.2 el 56.6 pa 83.3 P: az 56.2 el 22.4 pa -60.2 u,v (fr/asec) 11953.689 -3644.851 simultaneous interpolator

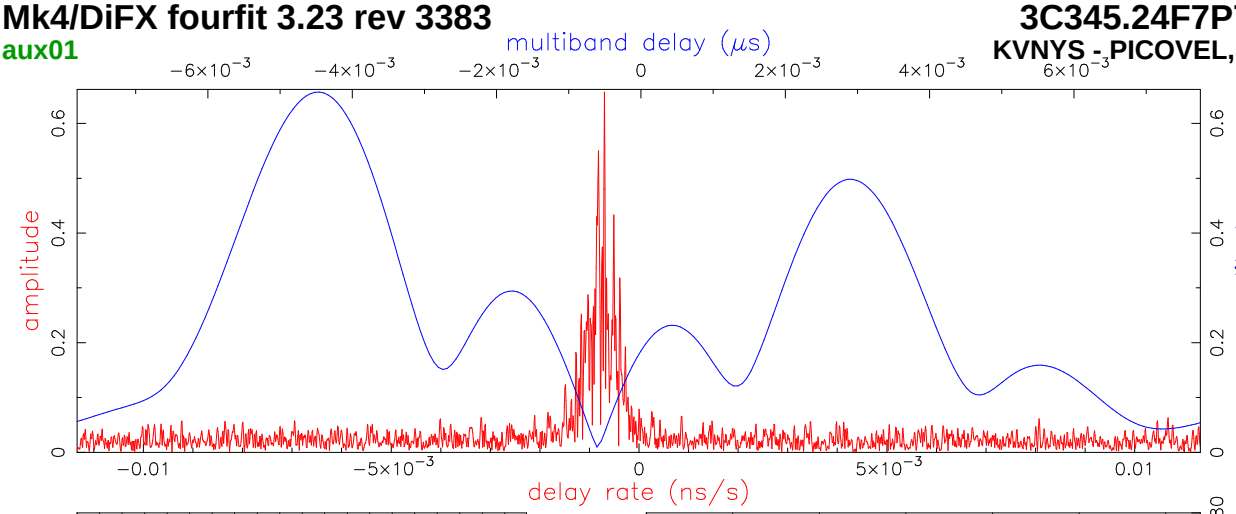
Control file: cf_1234_gmva Input file: /Exps/c212a/v1/3mm/1234/No0207/uP..24F7P7 Output file: /Exps/c212a/v1/3mm/1234/No0207/uP.W.85.24F7P7

# Mk4/DiFX fourfit 3.23 rev 3383

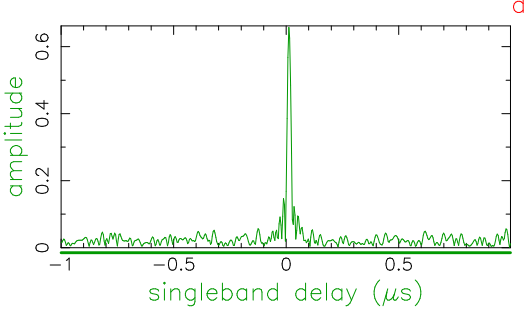
**aux01**

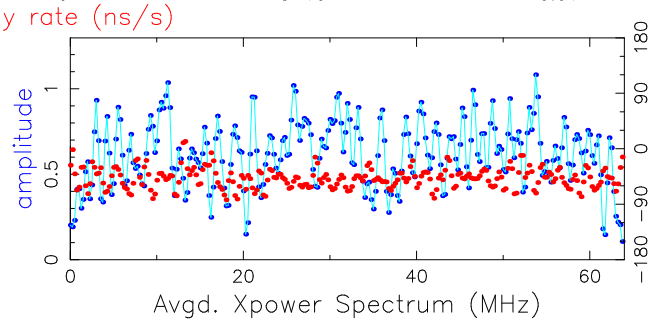
# 3C345.24F7P7, No0207, yP

**KVNYS - PICOVEL, fgroup W, pol LL**

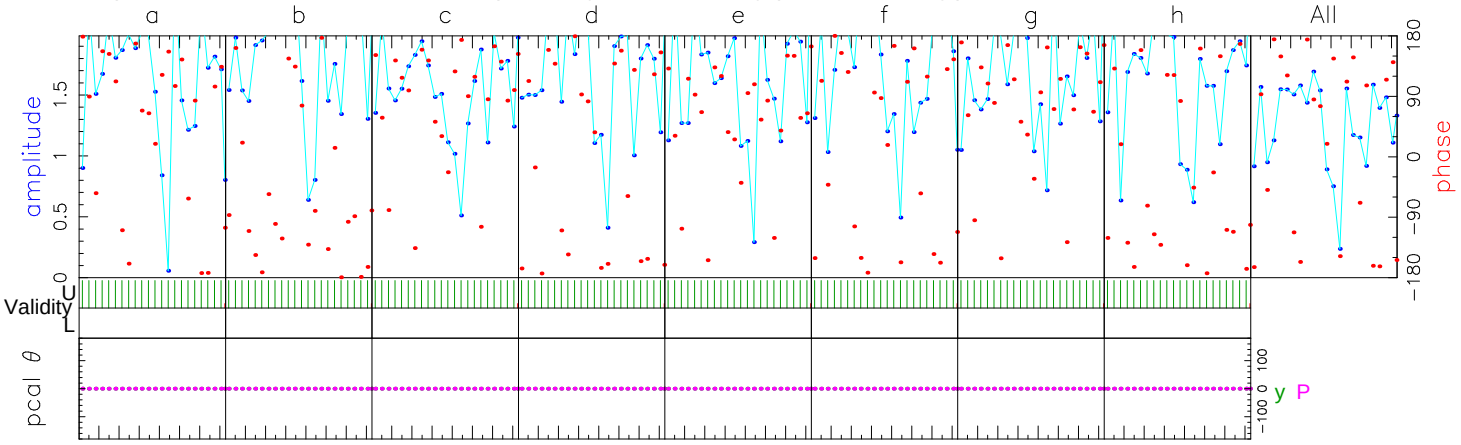



| | |
|---|---|
| Fringe quality | 4 |
| SNR | 37.0 |
| Int time | 419.822 |
| Amp | 0.662 |
| Phase | 148.5 |
| PFD | 0.0e+00 |
| Delays (us) | |
| SBD | 0.012677 |
| MBD | -0.004467 |
| Fringe rate (Hz) | -0.060040 |
| Ion TEC | 0.000 |
| Ref freq (MHz) | 86140.0000 |
| AP (sec) | 0.512 |
| Exp. | c212a |
| Exper # | 1234 |
| Yr:day | 2021:274 |
| Start | 101501.00 |
| Stop | 102200.84 |
| FRT | 101831.00 |
| Corr/FF/build | 2022:081:054223 2022:083:151718 2021:308:113728 |
| RA & Dec (J2000) | 16h42m58.809967s +39°48'36.993984" |




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




| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
|---|---|---|---|---|---|---|---|---|---|---|
| | 134.5 | -143.2 | 122.1 | 162.3 | 88.0 | 159.5 | 109.6 | -163.2 | Phase | 148.5 |
| | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 | 1.0 | 0.9 | 0.8 | Ampl. | 0.9 |
| | 260.7 | 260.4 | 260.5 | 260.5 | 260.8 | 260.6 | 261.1 | 260.8 | Sbd box | 260.2 |
| U/L | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | APs used | |
| y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| y:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| y:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| y | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids Tracks | |
| P | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids Tracks | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group delay (usec) (SBD) | 9.72755667115E+03 | Apriori delay (usec) | 9.72754551301E+03 | Resid mbdelay (usec) | -4.46686E-03 | +/- | 2.9E-05 |
| Sband delay (usec) | 9.72755818976E+03 | Apriori clock (usec) | 1.2002850E+00 | Resid sbdelay (usec) | 1.26768E-02 | +/- | 2.3E-04 |
| Phase delay (usec) | 9.72754551780E+03 | Apriori clockrate (us/s) | 4.0199999E-07 | Resid phdelay (usec) | 4.78745E-06 | +/- | 1.0E-07 |
| Delay rate (us/s) | -1.57402405582E+00 | Apriori rate (us/s) | -1.57402335882E+00 | Resid rate (us/s) | -6.97001E-07 | +/- | 4.1E-10 |
| Total phase (deg) | 325.1 | Apriori accel (us/s/s) | -5.12390701583E-05 | Resid phase (deg) | 148.5 | +/- | 3.1 |

| | RMS | Theor. | Amplitude | 0.662 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | |
|---|---|---|---|---|---|---|---|---|
| ph/seg (deg) | 69.4 | 7.4 | Search (2048X32) | 0.648 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 105.0 | 12.9 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 47.2 | 4.4 | Inc. seg. avg. | 1.249 | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 30.2 | 7.6 | Inc. frq. avg. | 0.852 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) | 0.00 0.00 |

y: az 286.7 el 59.0 pa 80.8 P: az 56.2 el 22.4 pa -60.2 u,v (fr/asec) 11614.881 -3482.465 simultaneous interpolator

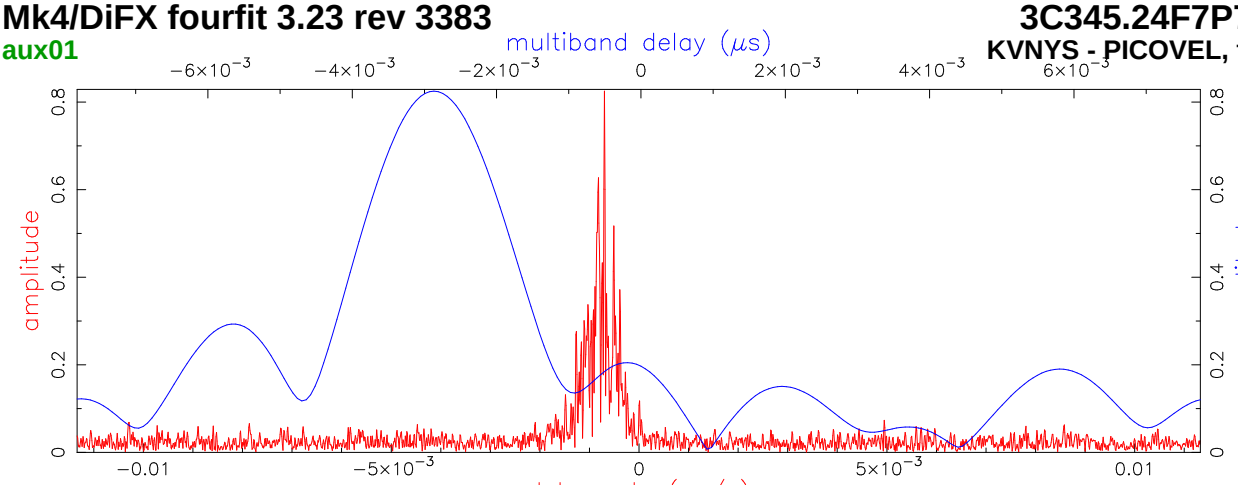
Control file: cf_1234_gmva Input file: /Exps/c212a/v1/3mm/1234/No0207/yP..24F7P7 Output file: /Exps/c212a/v1/3mm/1234/No0207/yP.W.102.24F7P7

# Mk4/DiFX fourfit 3.23 rev 3383

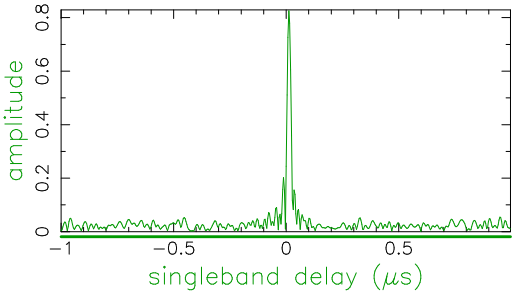
**aux01**

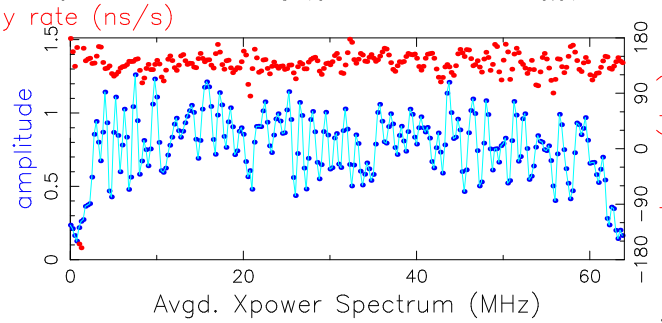
# 3C345.24F7P7, No0207, yP

**KVNYS - PICOVEL, fgroup W, pol RR**

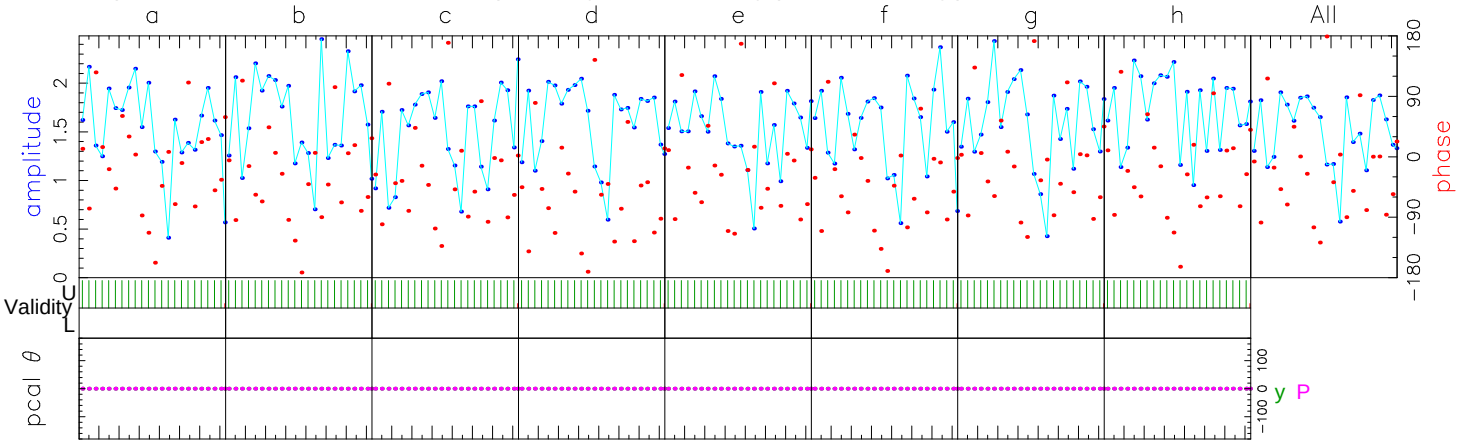



| | |
|---|---|
| Fringe quality | 6 |
| SNR | 46.4 |
| Int time | 419.822 |
| Amp | 0.829 |
| Phase | -44.9 |
| PFD | 0.0e+00 |
| Delays (us) | |
| SBD | 0.012439 |
| MBD | -0.002863 |
| Fringe rate (Hz) | -0.060077 |
| Ion TEC | 0.000 |
| Ref freq (MHz) | 86140.0000 |
| AP (sec) | 0.512 |
| Exp. | c212a |
| Exper # | 1234 |
| Yr:day | 2021:274 |
| Start | 101501.00 |
| Stop | 102200.84 |
| FRT | 101831.00 |
| Corr/FF/build | 2022:081:054223 2022:083:151723 2021:308:113728 |
| RA & Dec (J2000) | 16h42m58.809967s +39°48'36.993984" |




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




| | | | | | | | | | Freq (MHz) | All |
|---|---|---|---|---|---|---|---|---|---|---|
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Phase | -44.9 |
| | -21.1 | -42.2 | -52.6 | -79.8 | -41.3 | -53.8 | -37.4 | -32.8 | Ampl. | 0.9 |
| | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 | 1.0 | Sbd box | 260.2 |
| | 260.1 | 260.1 | 259.9 | 260.1 | 260.6 | 259.9 | 260.6 | 260.3 | | |
| U/L | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | APs used | |
| y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| y:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| y:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| y | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| y | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids Tracks | |
| P | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids Tracks | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group delay (usec) (SBD) | 9.72755827478E+03 | Apriori delay (usec) | 9.72754551301E+03 | Resid mbdelay (usec) | -2.86323E-03 | +/- | 2.3E-05 |
| Sband delay (usec) | 9.72755795201E+03 | Apriori clock (usec) | 1.2002850E+00 | Resid sbdelay (usec) | 1.24390E-02 | +/- | 1.9E-04 |
| Phase delay (usec) | 9.72754551156E+03 | Apriori clockrate (us/s) | 4.0199999E-07 | Resid phdelay (usec) | -1.44643E-06 | +/- | 8.0E-08 |
| Delay rate (us/s) | -1.57402405625E+00 | Apriori rate (us/s) | -1.57402335882E+00 | Resid rate (us/s) | -6.97435E-07 | +/- | 3.3E-10 |
| Total phase (deg) | 131.8 | Apriori accel (us/s/s) | -5.12390701583E-05 | Resid phase (deg) | -44.9 | +/- | 2.5 |

| | RMS | Theor. | Amplitude | 0.829 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | |
|---|---|---|---|---|---|---|---|---|
| ph/seg (deg) | 67.9 | 5.9 | Search (2048X32) | 0.801 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 92.8 | 10.3 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 18.9 | 3.5 | Inc. seg. avg. | 1.510 | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 7.7 | 6.1 | Inc. frq. avg. | 0.859 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) | 0.00 0.00 |

y: az 286.7 el 59.0 pa 80.8 P: az 56.2 el 22.4 pa -60.2 u,v (fr/asec) 11614.881 -3482.465 simultaneous interpolator

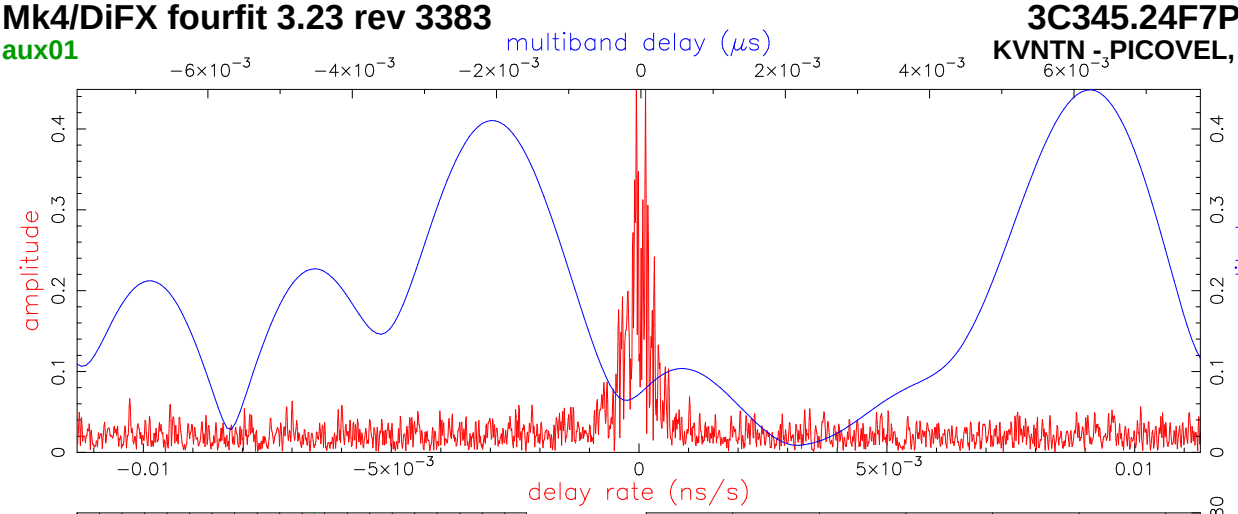
Control file: cf_1234_gmva Input file: /Exps/c212a/v1/3mm/1234/No0207/yP..24F7P7 Output file: /Exps/c212a/v1/3mm/1234/No0207/yP.W.121.24F7P7

# Mk4/DiFX fourfit 3.23 rev 3383

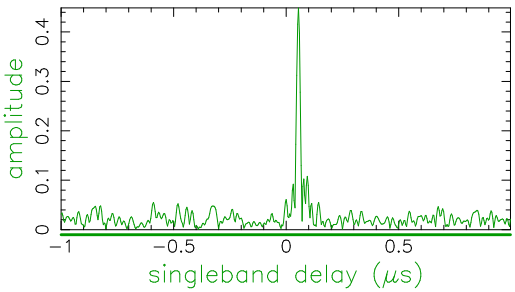
**aux01**

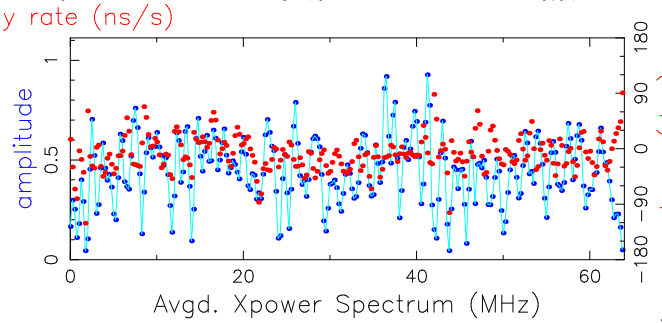
# 3C345.24F7P7, No0207, tP

**KVNTN - PICOVEL, fgroup W, pol LL**

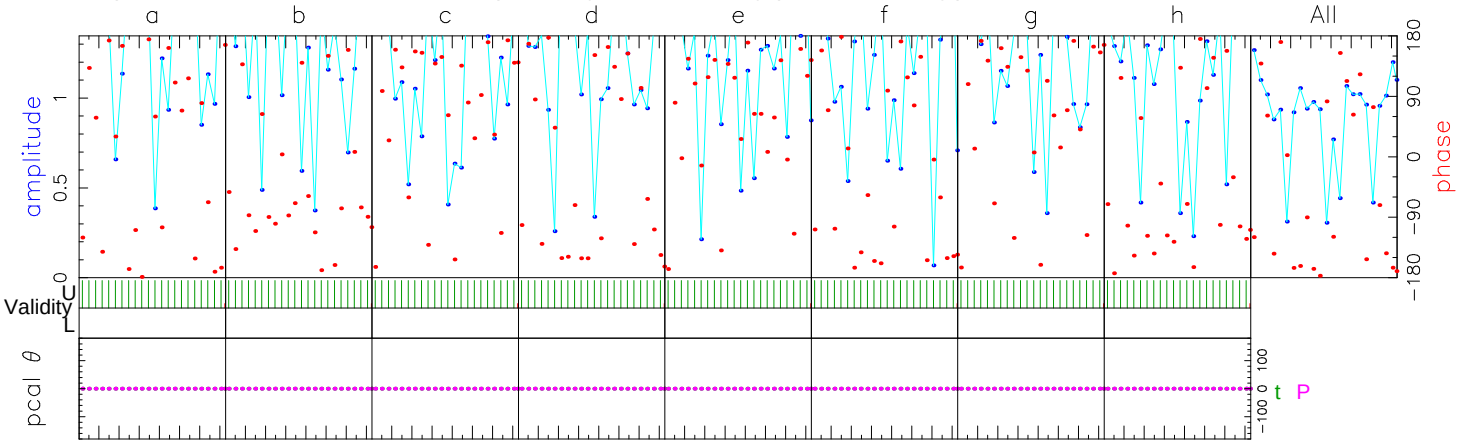



| | |
|---|---|
| Fringe quality | 5 |
| SNR | 25.1 |
| Int time | 419.822 |
| Amp | 0.449 |
| Phase | -174.8 |
| PFD | 0.0e+00 |
| Delays (us) | |
| SBD | 0.054255 |
| MBD | 0.006215 |
| Fringe rate (Hz) | 0.011667 |
| Ion TEC | 0.000 |
| Ref freq (MHz) | 86140.0000 |
| AP (sec) | 0.512 |
| Exp. | c212a |
| Exper # | 1234 |
| Yr:day | 2021:274 |
| Start | 101501.00 |
| Stop | 102200.84 |
| FRT | 101831.00 |
| Corr/FF/build | 2022:081:054223 2022:083:151704 2021:308:113728 |
| RA & Dec (J2000) | 16h42m58.809967s +39°48'36.993984" |




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




| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Freq (MHz) | All |
| | 174.6 | -99.7 | 137.7 | -160.2 | 120.2 | -161.7 | 142.0 | -123.6 | Phase | -174.8 |
| | 0.7 | 0.7 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | Ampl. | 0.6 |
| | 271.6 | 271.5 | 270.9 | 271.3 | 271.4 | 271.3 | 271.6 | 271.4 | Sbd box | 270.9 |
| U/L | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | APs used | |
| t | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| t:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| t:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| t | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| t | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids Tracks | |
| P | W00UL | W01UL | W02UL | W03UL | W04UL | W05UL | W06UL | W07UL | Chan ids Tracks | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group delay (usec) (SBD) | 9.51081907700E+03 | Apriori delay (usec) | 9.51076598716E+03 | Resid mbdelay (usec) | 6.21483E-03 | +/- | 4.3E-05 |
| Sband delay (usec) | 9.51082024241E+03 | Apriori clock (usec) | 1.4134617E+00 | Resid sbdelay (usec) | 5.42553E-02 | +/- | 3.4E-04 |
| Phase delay (usec) | 9.51076598153E+03 | Apriori clockrate (us/s) | -3.1800002E-07 | Resid phdelay (usec) | -5.63551E-06 | +/- | 1.5E-07 |
| Delay rate (us/s) | -1.60144180940E+00 | Apriori rate (us/s) | -1.60144194485E+00 | Resid rate (us/s) | 1.35446E-07 | +/- | 6.1E-10 |
| Total phase (deg) | -126.5 | Apriori accel (us/s/s) | -5.44692654673E-05 | Resid phase (deg) | -174.8 | +/- | 4.6 |

| | RMS | Theor. | Amplitude | 0.449 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | |
|---|---|---|---|---|---|---|---|---|
| ph/seg (deg) | 74.8 | 10.9 | Search (2048X32) | 0.434 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 114.5 | 19.1 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 53.4 | 6.4 | Inc. seg. avg. | 0.874 | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 42.9 | 11.2 | Inc. frq. avg. | 0.630 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) | 0.00 0.00 |

t: az 293.2 el 57.9 pa 89.6 P: az 56.2 el 22.4 pa -60.2 u,v (fr/asec) 11811.027 -4110.333 simultaneous interpolator

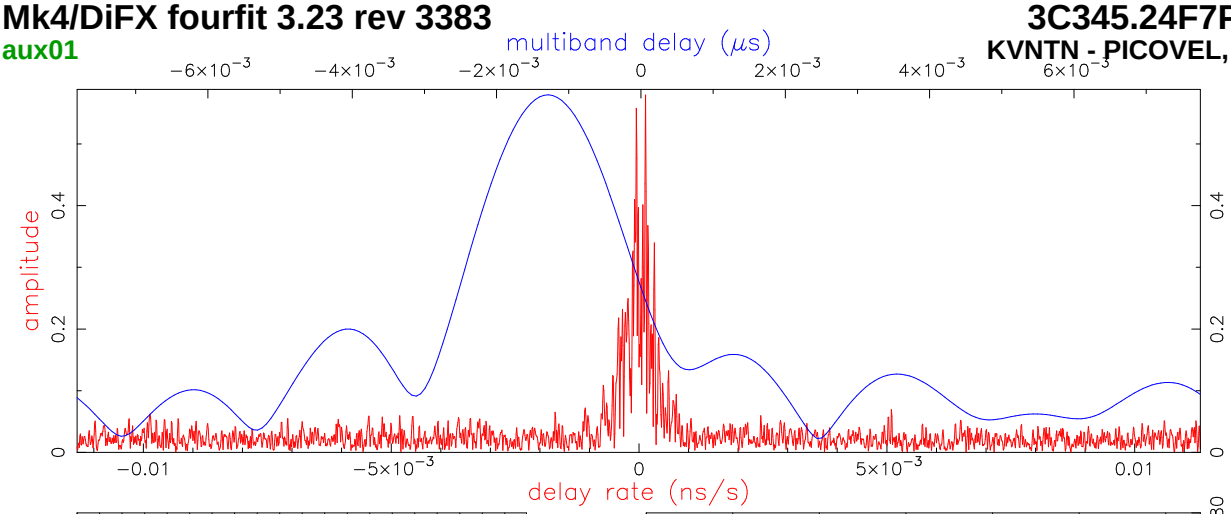
Control file: cf_1234_gmva Input file: /Exps/c212a/v1/3mm/1234/No0207/tP..24F7P7 Output file: /Exps/c212a/v1/3mm/1234/No0207/tP.W.38.24F7P7

# Mk4/DiFX fourfit 3.23 rev 3383

**aux01**

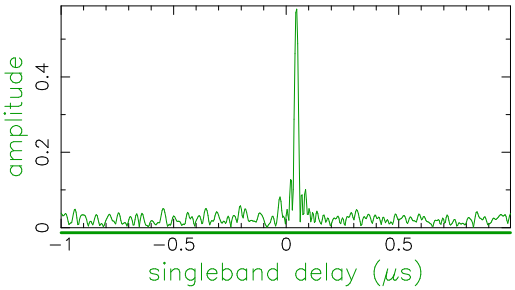
# 3C345.24F7P7, No0207, tP

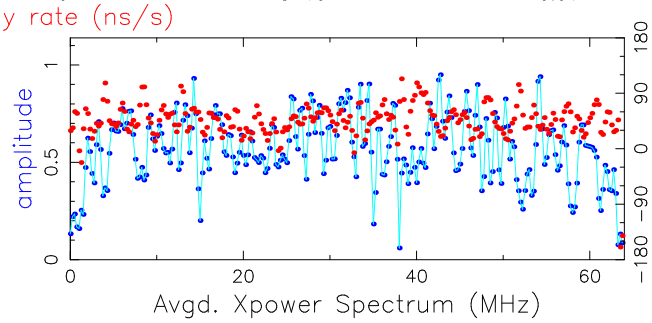
**KVNTN - PICOVEL, fgroup W, pol RR**



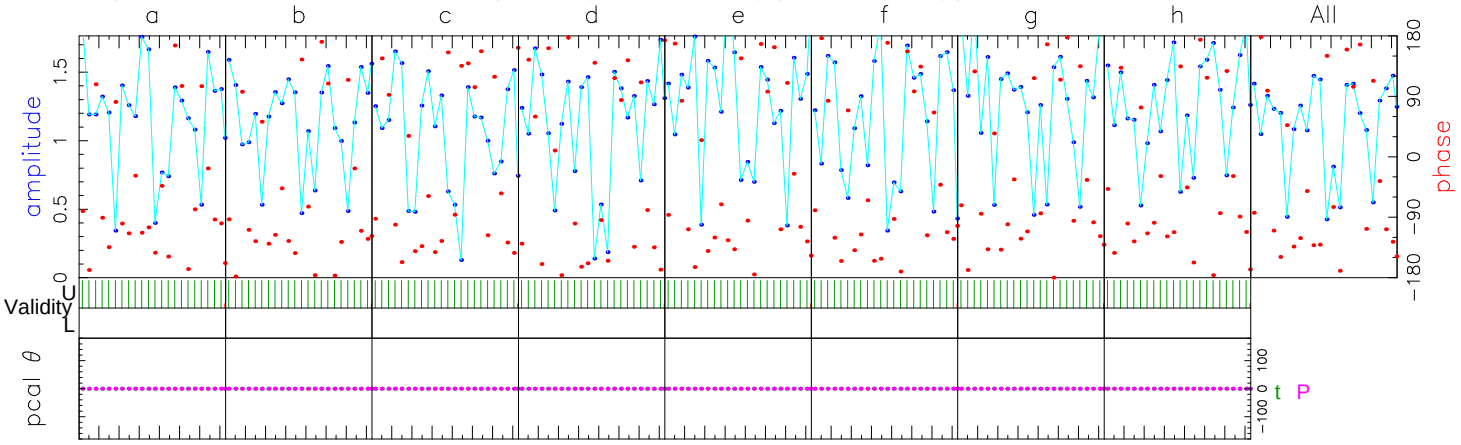

Fringe quality 6

| | |
|---|---|
| SNR | 33.0 |
| Int time | 419.822 |
| Amp | 0.589 |
| Phase | -136.6 |
| PFD | 0.0e+00 |
| Delays (us) | |
| SBD | 0.045280 |
| MBD | -0.001301 |
| Fringe rate (Hz) | 0.011664 |
| Ion TEC | 0.000 |
| Ref freq (MHz) | 86140.0000 |
| AP (sec) | 0.512 |
| Exp. | c212a |
| Exper # | 1234 |
| Yr:day | 2021:274 |
| Start | 101501.00 |
| Stop | 102200.84 |
| FRT | 101831.00 |
| Corr/FF/build | 2022:081:054223 2022:083:151709 2021:308:113728 |
| RA & Dec (J2000) | 16h42m58.809967s +39°48'36.993984" |




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




| | | | | | | | | | Freq (MHz) | All |
|---|---|---|---|---|---|---|---|---|---|---|
| | 86012.00 | 86076.00 | 86140.00 | 86204.00 | 86268.00 | 86332.00 | 86396.00 | 86460.00 | Phase | -136.6 |
| | -110.8 | -133.6 | -147.6 | -176.8 | -137.3 | -145.8 | -126.6 | -120.0 | Ampl. | 0.6 |
| | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 0.5 | 0.7 | 0.6 | Sbd box | 268.6 |
| | 268.4 | 268.6 | 268.1 | 268.4 | 268.8 | 268.6 | 269.1 | 268.8 | | |
| U/L | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | 820/0 | APs used | |
| t | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC freqs | |
| t:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | PC phase | |
| t:P | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 | Manl PC | |
| t | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | PC amp | |
| P | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | | |
| t | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids Tracks | |
| P | W00UR | W01UR | W02UR | W03UR | W04UR | W05UR | W06UR | W07UR | Chan ids Tracks | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group delay (usec) (SBD) | 9.51081156147E+03 | Apriori delay (usec) | 9.51076598716E+03 | Resid mbdelay (usec) | -1.30070E-03 | +/- | 3.3E-05 |
| Sband delay (usec) | 9.51081126716E+03 | Apriori clock (usec) | 1.4134617E+00 | Resid sbdelay (usec) | 4.52800E-02 | +/- | 2.6E-04 |
| Phase delay (usec) | 9.51076598276E+03 | Apriori clockrate (us/s) | -3.1800002E-07 | Resid phdelay (usec) | -4.40592E-06 | +/- | 1.1E-07 |
| Delay rate (us/s) | -1.60144180944E+00 | Apriori rate (us/s) | -1.60144194485E+00 | Resid rate (us/s) | 1.35410E-07 | +/- | 4.6E-10 |
| Total phase (deg) | -88.3 | Apriori accel (us/s/s) | -5.44692654673E-05 | Resid phase (deg) | -136.6 | +/- | 3.5 |

| | RMS | Theor. | Amplitude | 0.589 +/- 0.018 | Pcal mode: MANUAL, MANUAL | PC period (AP's) 5, 5 | | |
|---|---|---|---|---|---|---|---|---|
| ph/seg (deg) | 72.3 | 8.3 | Search (2048X32) | 0.562 | Pcal rate: 0.000E+00, 0.000E+00 (us/s) | | sb window (us) | -1.000 1.000 |
| amp/seg (%) | 106.7 | 14.5 | Interp. | 0.000 | Bits/sample: 2x2 | SampCntNorm: enabled | mb window (us) | -0.008 0.008 |
| ph/frq (deg) | 21.9 | 4.9 | Inc. seg. avg. | 1.106 | Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us | | dr window (ns/s) | -0.011 0.011 |
| amp/frq (%) | 9.1 | 8.6 | Inc. frq. avg. | 0.610 | Data rate(Mb/s): 2048 | nlags: 256 t_cohere infinite | ion window (TEC) | 0.00 0.00 |

t: az 293.2 el 57.9 pa 89.6 P: az 56.2 el 22.4 pa -60.2 u,v (fr/asec) 11811.027 -4110.333 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c212a/v1/3mm/1234/No0207/tP..24F7P7 Output file: /Exps/c212a/v1/3mm/1234/No0207/tP.W.55.24F7P7