

# C192C/MB011B Correlation Report

## General information

- Consists of only one science project: **MB011B**
- 2013+370 (277:1445-1701) data from [C192B](#) are also used for MB011B.  
For performance of this part see [C192B](#) page, the pclist for the fits of this part see below as mb011b\_ADD.fits.
- PI: Bach
- Targets: Cygnus A (including the second phase center Cygnus A2, see Notes section below)
- Session info: <http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/>
- Station feedback: [http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/oct19/feedback\\_oct19.asc](http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/oct19/feedback_oct19.asc)
- Text file with detailed antenna statistics, scroll down to get to the cumulative statistics for the whole experiment:  
[c192c ALL.antrep](#)  
  
[c192c PV ALL.antrep](#)
- Two correlations were done, the main with P3 = Pico Veleta DBBC3 (16 x 32 MHz per pol) and another with PV = Pico Veleta DBBC2 (8 x 64 MHz per pol).  
All files without additional mark refer to the P3 correlation, and those marked with PV -- to the PV one.

## Current Status

Correlation finished, data **released to PI** on 14.04.2020.

## Fringes

| Station | Code | Fringes | Plots   | Comments   |
|---------|------|---------|---|--|
| Ef      | B    | yes     | <p>Fringe overview of all baselines (all of C192A) including this antenna in LL(left for each baseline) and RR (right for each baseline).</p> <p>Legend: white box - scheduled, but no data, blue - no fringe, green -- good fringe, red -- false fringe found by fourfit (detected by very large SBD).</p> <p><a href="#">c192c_SBD_RfAnt_Ef_LLRR_AllSrc.pdf</a></p> <p><a href="#">c192cPV_SBD_RfAnt_Ef_LLRR_AllSrc.pdf</a></p> <p>Examples of fourfit fringe plots can be found in:</p> <p><a href="#">No0048_Ef.pdf</a>, <a href="#">No0048_PV_Ef.pdf</a></p> | <p>Participated in <b>77 out of 78</b> scheduled scans, fringes in <b>774 out of 1462</b> expected baselines in    pols, mean <b>SNR 44</b>. See .antrep file for detailed per source and per scan statistics.</p> |

| Station | Code | Fringes | Plots  | Comments   |
|---------|------|---------|--|--|
|         |      |         | Antenna statistics:<br><a href="#">c192c_Ef.antrep</a> , <a href="#">c192c_PV_Ef.antrep</a><br><b>Same for all antennas below unless otherwise noted.</b>  |  |
| On      | X    | yes     | <a href="#">c192c_SBD_RfAnt_On_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_On_LLRR_AllSrc.pdf</a><br><a href="#">No0056_On.pdf</a> , <a href="#">No0056_PV_On.pdf</a><br><a href="#">c192c_On.antrep</a> , <a href="#">c192c_PV_On.antrep</a> | Participated in <b>80 out of 82</b> scheduled scans, fringes in <b>813 out of 1534</b> expected baselines in    pols, mean SNR <b>46</b> . See .antrep file for detailed per source and per scan statistics.   |
| Ys      | Y    | yes     | <a href="#">c192c_SBD_RfAnt_Ys_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Ys_LLRR_AllSrc.pdf</a><br><a href="#">No0065_Ys.pdf</a> , <a href="#">No0065_PV_Ys.pdf</a><br><a href="#">c192c_Ys.antrep</a> , <a href="#">c192c_PV_Ys.antrep</a> | Participated in <b>78 out of 78</b> scheduled scans, fringes in <b>628 out of 1470</b> expected baselines in    pols, mean SNR <b>34</b> . See .antrep file for detailed per source and per scan statistics.   |
| Mh      | Z    | yes     | <a href="#">c192c_SBD_RfAnt_Mh_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Mh_LLRR_AllSrc.pdf</a><br><a href="#">No0011_Mh.pdf</a> , <a href="#">No0011_PV_Mh.pdf</a><br><a href="#">c192c_Mh.antrep</a> , <a href="#">c192c_PV_Mh.antrep</a> | Participated in <b>82 out of 82</b> scheduled scans, fringes in <b>543 out of 1550</b> expected baselines in    pols, mean SNR <b>21</b> . See .antrep file for detailed per source and per scan statistics.   |
| Pv      | P    | yes     | <a href="#">c192cPV_SBD_RfAnt_Pv_LLRR_AllSrc.pdf</a><br><a href="#">No0067_PV_Pv.pdf</a><br><a href="#">c192c_PV_Pv.antrep</a>   | Pv is Pico Veleta with DBBC2<br><br>Due to an undetermined problem both polarization channels recorded RCP and LCP was lost for about a quarter of this experiment. Scans No0001-No0024 have this problem, starting from No0025 polarization setup gets to normal:<br><a href="#">map of good/bad polarization scans is HERE</a><br><br>(red = bad, green = good)<br><br>That's why only a secondary correlation was made with this backend, primary production correlation was done with DBBC3 backend, P3.<br><br>Participated in <b>68 out of 73</b> scheduled scans, fringes in <b>765 out of 1338</b> expected baselines in    pols, mean SNR <b>79</b> . See .antrep file for detailed per source and per scan statistics. |

| Station     | Code | Fringes | Plots  | Comments  |
|-------------|------|---------|--|---|
| P3          | i    | yes     | <a href="#">c192c_SBD_RfAnt_P3_LLRR_AllSrc.pdf</a><br><a href="#">No0067_P3.pdf</a><br><a href="#">c192c_P3.antrep</a>   | <p>P3 is Pico Veleta with DBBC3 (16 x 32MHz per pol)</p> <p>Because of problems with DBBC2 data this was used in the primary production correlation.</p> <p>Participated in <b>68 out of 73</b> scheduled scans, fringes in <b>790 out of 1338</b> expected baselines in    pols, mean SNR 50. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Special processing</b> was applied to this data, it is described in detail <a href="#">HERE</a>.</p> |
| GLT:<br>Gl  | g    | yes     | <a href="#">c192c_SBD_RfAnt_Gl_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Gl_LLRR_AllSrc.pdf</a><br><a href="#">No0048_Gl.pdf</a> , <a href="#">No0048_PV_Gl.pdf</a><br><a href="#">c192c_Gl.antrep</a> , <a href="#">c192c_PV_Gl.antrep</a>   | <p>Participated in <b>117 out of 117</b> scheduled scans, fringes in <b>428 out of 2248</b> expected baselines in    pols, mean SNR 25. See .antrep file for detailed per source and per scan statistics.</p> <p>Observations interrupted by snow stops, some flagging may be necessary.</p>  |
| VLBA:<br>Br | b    | yes     | <a href="#">c192c_SBD_RfAnt_Br_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Br_LLRR_AllSrc.pdf</a><br><a href="#">No0044_Br.pdf</a> , <a href="#">No0044_PV_Br.pdf</a><br><a href="#">c192c_Br.antrep</a> , <a href="#">c192c_PV_Br.antrep</a>   | <p>Participated in <b>80 out of 80</b> scheduled scans, fringes in <b>63 out of 1768</b> expected baselines in    pols, mean SNR 15. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Poorly performed.</b> A detailed report on VLBA's poor performance in this session is given <a href="#">HERE</a>.</p>  |
| VLBA:<br>Fd | f    | yes     | <a href="#">c192c_SBD_RfAnt_Fd_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Fd_LLRR_AllSrc.pdf</a><br><a href="#">No0080_Fd.pdf</a><br><a href="#">No0080_PV_Fd.pdf</a><br><a href="#">c192c_Fd.antrep</a><br><a href="#">c192c_PV_Fd.antrep</a> | <p>Participated in <b>80 out of 80</b> scheduled scans, fringes in <b>179 out of 1768</b> expected baselines in    pols, mean SNR 22. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Poorly performed.</b> A detailed report on VLBA's poor performance in this session is given <a href="#">HERE</a>.</p>   |
| VLBA:<br>Kp | k    | yes     | <a href="#">c192c_SBD_RfAnt_Kp_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Kp_LLRR_AllSrc.pdf</a><br><a href="#">No0065_Kp.pdf</a><br><a href="#">No0065_PV_Kp.pdf</a><br><a href="#">c192c_Kp.antrep</a>                                       | <p>Participated in <b>76 out of 76</b> scheduled scans, fringes in <b>154 out of 1692</b> expected baselines in    pols, mean SNR 15. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Poorly performed.</b> A detailed report on VLBA's poor performance in this session is given <a href="#">HERE</a>.</p>   |

| Station     | Code | Fringes | Plots  | Comments   |
|-------------|------|---------|--|--|
|             |      |         | <a href="#">c192c_PV_Kp.antrep</a>   |  |
| VLBA:<br>La | l    | yes     | <a href="#">c192c_SBD_RfAnt_La_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_La_LLRR_AllSrc.pdf</a><br><a href="#">No0072_La.pdf</a><br><a href="#">No0072_PV_La.pdf</a><br><a href="#">c192c_La.antrep</a><br><a href="#">c192c_PV_La.antrep</a>   | <p>Participated in <b>80 out of 80</b> scheduled scans, fringes in <b>171 out of 1768</b> expected baselines in    pols, mean <b>SNR 19</b>. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Poorly performed.</b> A detailed report on VLBA's poor performance in this session is given <a href="#">HERE</a>.</p> |
| VLBA:<br>Mk | m    | yes     | <a href="#">c192c_SBD_RfAnt_Mk_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Mk_LLRR_AllSrc.pdf</a><br><a href="#">No0075_Mk.pdf</a><br><a href="#">No0075_PV_Mk.pdf</a><br><a href="#">c192c_Mk.antrep</a><br><a href="#">c192c_PV_Mk.antrep</a>   | <p>Participated in <b>54 out of 54</b> scheduled scans, fringes in <b>147 out of 1176</b> expected baselines in    pols, mean <b>SNR 13</b>. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Poorly performed.</b> A detailed report on VLBA's poor performance in this session is given <a href="#">HERE</a>.</p> |
| VLBA:<br>Nl | n    | yes     | <a href="#">c192c_SBD_RfAnt_Nl_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Nl_LLRR_AllSrc.pdf</a><br><a href="#">No0117_Nl.pdf</a><br><a href="#">No0117_PV_Nl.pdf</a><br><a href="#">c192c_Nl.antrep</a><br><a href="#">c192c_PV_Nl.antrep</a><br><br>80 80 0.991 99 1768 1768 29 2 10 | <p>Participated in <b>80 out of 80</b> scheduled scans, fringes in <b>29 out of 1768</b> expected baselines in    pols, mean <b>SNR 10</b>. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Poorly performed.</b> A detailed report on VLBA's poor performance in this session is given <a href="#">HERE</a>.</p>  |
| VLBA:<br>Ov | o    | yes     | <a href="#">c192c_SBD_RfAnt_Ov_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Ov_LLRR_AllSrc.pdf</a><br><a href="#">No0070_Ov.pdf</a><br><a href="#">No0070_PV_Ov.pdf</a><br><a href="#">c192c_Ov.antrep</a>   | <p>Participated in <b>75 out of 76</b> scheduled scans, fringes in <b>277 out of 1670</b> expected baselines in    pols, mean <b>SNR 20</b>. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Poorly performed.</b> A detailed report on VLBA's poor performance in this session is given <a href="#">HERE</a>.</p> |

| Station     | Code | Fringes | Plots  | Comments  |
|-------------|------|---------|--|---|
|             |      |         | <a href="#">c192c_PV_Ov.antrep</a>   |   |
| VLBA:<br>Pt | p    | yes     | <a href="#">c192c_SBD_RfAnt_Pt_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Pt_LLRR_AllSrc.pdf</a><br><a href="#">No0072_Pt.pdf</a><br><a href="#">No0077_PV_Pt.pdf</a><br><a href="#">c192c_Pt.antrep</a><br><a href="#">c192c_PV_Pt.antrep</a> | <p>Participated in <b>80 out of 80</b> scheduled scans, fringes in <b>54 out of 1768</b> expected baselines in    pols, mean <b>SNR 11</b>. See .antrep file for detailed per source and per scan statistics.</p> <p><b>Poorly performed.</b> A detailed report on VLBA's poor performance in this session is given <a href="#">HERE</a>.</p>   |
| KVN:<br>Kt  | t    | yes     | <a href="#">c192c_SBD_RfAnt_Kt_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Kt_LLRR_AllSrc.pdf</a><br><a href="#">No0011_Kt.pdf</a> , <a href="#">No0011_PV_Kt.pdf</a><br><a href="#">c192c_Kt.antrep</a> , <a href="#">c192c_PV_Kt.antrep</a>   | <p>KVN observed in 8 x 64 MHz mode for the first time (correlated as 16 x 32 MHz with P3). Some loss of data due to bad weather and operational mistakes, but in general performance is much better than in any previous session,</p> <p>Participated in <b>42 out of 54</b> scheduled scans, fringes in <b>258 out of 792</b> expected baselines in    pols, mean <b>SNR 28</b>. See .antrep file for detailed per source and per scan statistics.</p> |
| KVN:<br>Ku  | u    | yes     | <a href="#">c192c_SBD_RfAnt_Ku_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Ku_LLRR_AllSrc.pdf</a><br><a href="#">No0011_Ku.pdf</a> , <a href="#">No0011_PV_Ku.pdf</a><br><a href="#">c192c_Ku.antrep</a> , <a href="#">c192c_PV_Ku.antrep</a>   | <p>KVN observed in 8 x 64 MHz mode for the first time (correlated as 16 x 32 MHz with P3). Some loss of data due to bad weather and operational mistakes, but in general performance is much better than in any previous session,</p> <p>Participated in <b>44 out of 54</b> scheduled scans, fringes in <b>273 out of 832</b> expected baselines in    pols, mean <b>SNR 26</b>. See .antrep file for detailed per source and per scan statistics.</p> |
| KVN:<br>Ky  | y    | yes     | <a href="#">c192c_SBD_RfAnt_Ky_LLRR_AllSrc.pdf</a><br><a href="#">c192cPV_SBD_RfAnt_Ky_LLRR_AllSrc.pdf</a><br><a href="#">No0011_Ky.pdf</a> , <a href="#">No0011_PV_Ky.pdf</a><br><a href="#">c192c_Ky.antrep</a> , <a href="#">c192c_PV_Ky.antrep</a>   | <p>KVN observed in 8 x 64 MHz mode for the first time (correlated as 16 x 32 MHz with P3). Some loss of data due to bad weather and operational mistakes, but in general performance is much better than in any previous session,</p> <p>Participated in <b>34 out of 35</b> scheduled scans, fringes in <b>320 out of 904</b> expected baselines in    pols, mean <b>SNR 34</b>. See .antrep file for detailed per source and per scan statistics.</p> |

## Notes

At PI's request the science target, Cygnus A2, was correlated with two phase centers:

CYG\_A (normal position) : RA 19:59:28.3564680 DEC 40:44:02.096078

CYG\_A2 : RA 19:59:28.3234500 DEC 40:44:01.913300

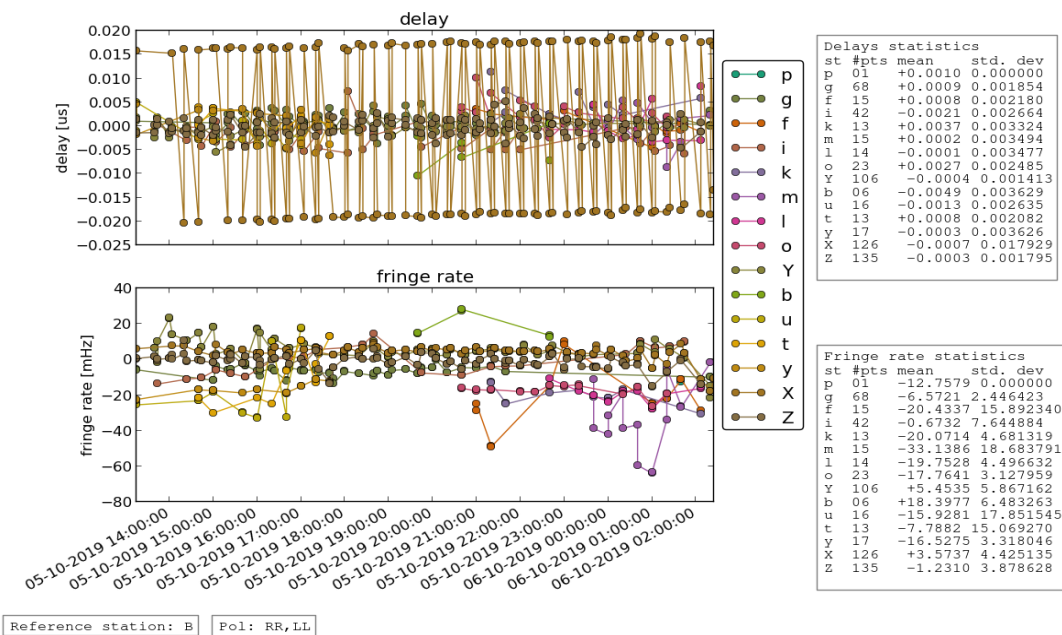
[Special processing of the P3 data](#)

[Report on the VLBA problems in this session](#)

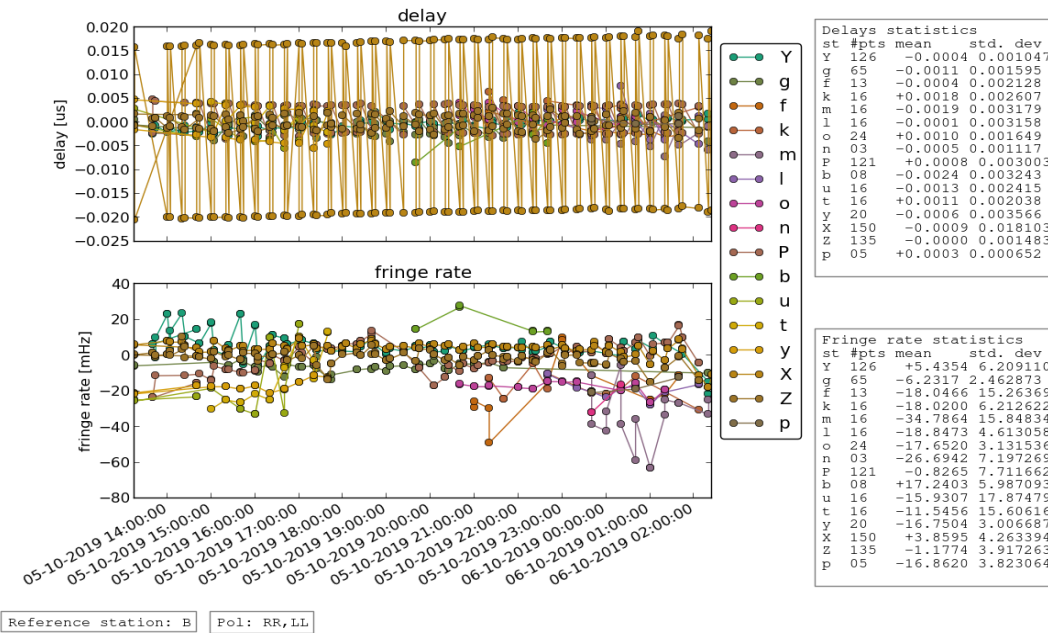
## Post-Correlation checks

### Residuals

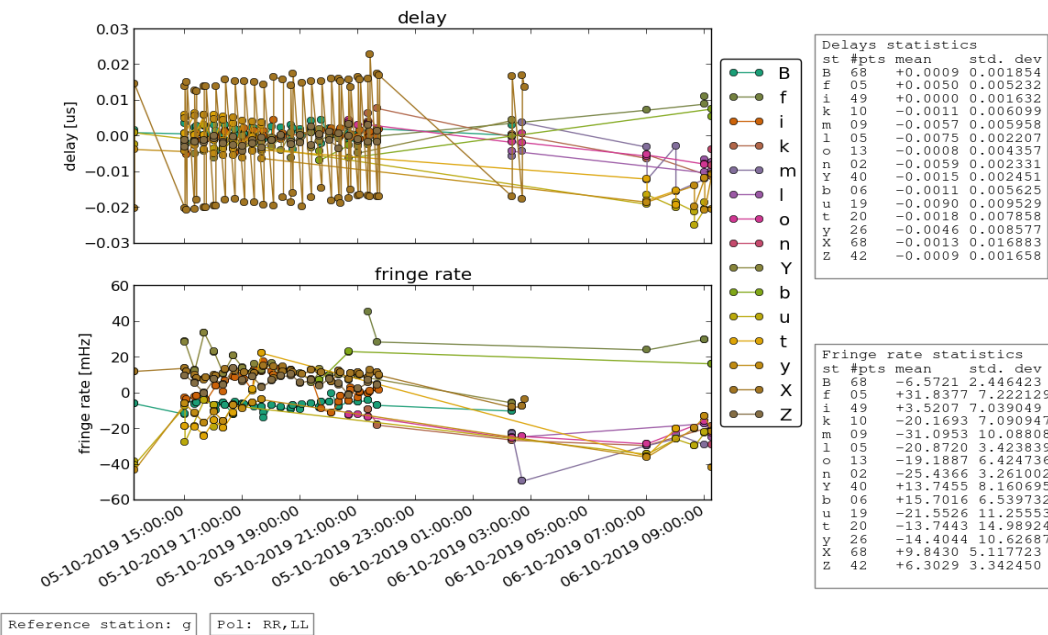
*E<sub>f</sub>* (with *i*=P3):



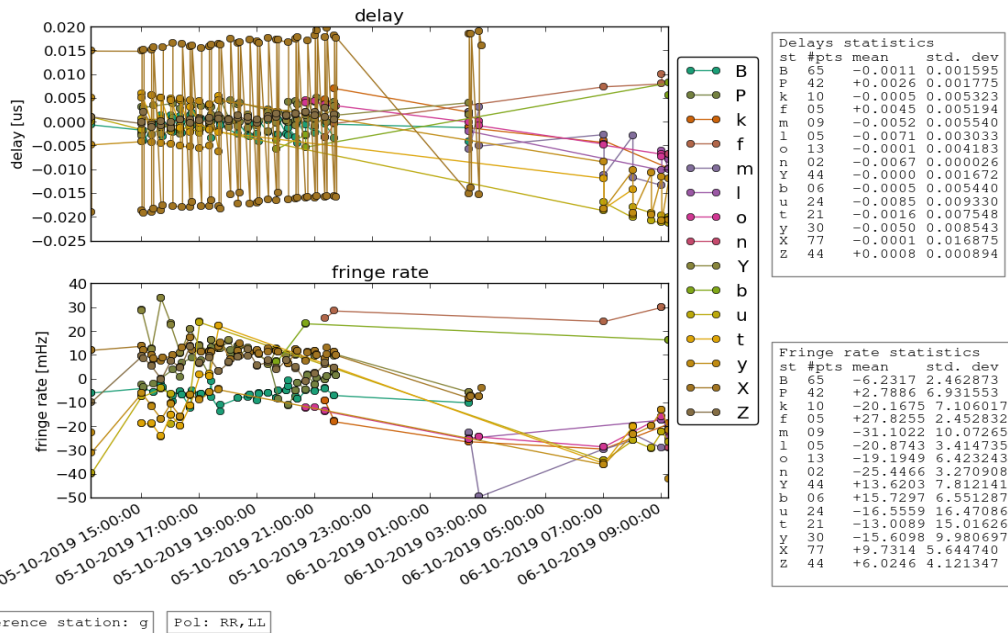
Ef (with P=Pv):



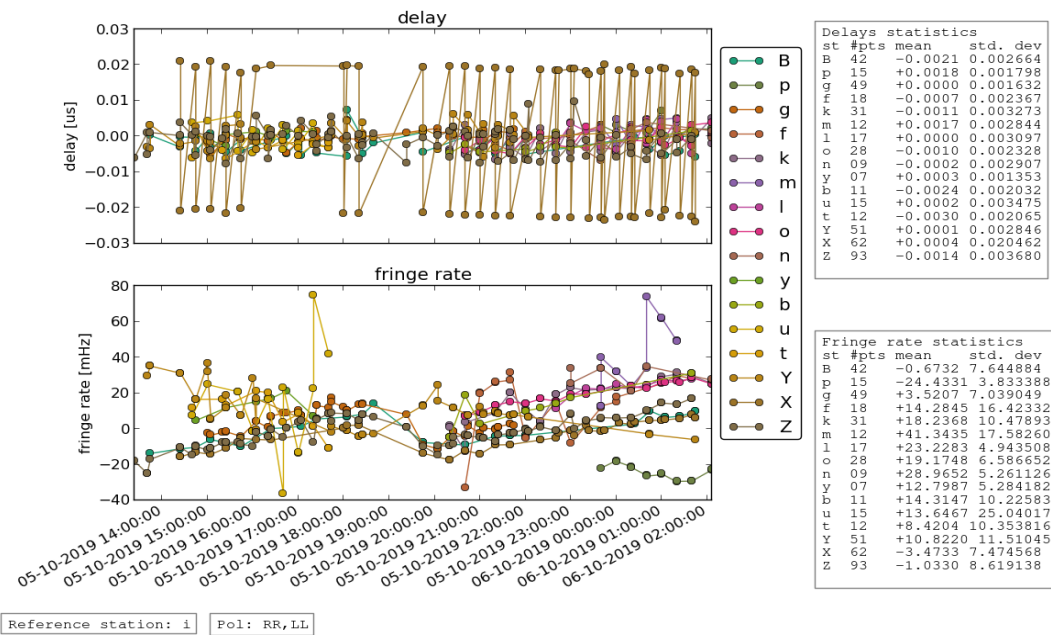
GLT (with i=P3):



GLT (with  $P=P_V$ ):

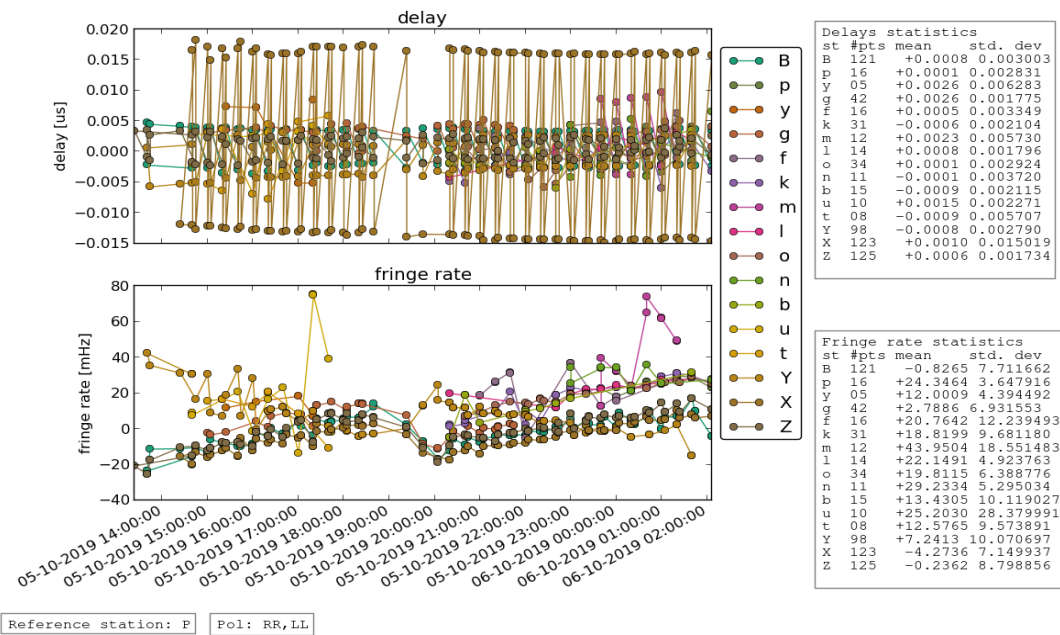


Pico Veleta ( $i = P3$ ):





Pico Veleta (P = Pv):



Reference station: P Pol: RR,LL

FITS completeness (pclist)

legend:

- o -- station scheduled and fully accounted for in the fits file
- 42 (or another number) -- station scheduled, but data found only for 42% of the scheduled interval
- x -- station scheduled, but corresponding entry not found in the fits file
- . -- station not scheduled

mb011b.fits:

|           |        |          |         | EF | P3 | YS | ON | MH | GL | KY | KU | KT | NL | FD | PT | LA | BR | OV | KP | MK |
|-----------|--------|----------|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| c192c_001 | No0001 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | 09 | 19 | x  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_002 | No0002 | CYG_A    | 3mm_ddc | x  | o  | 96 | 29 | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_003 | No0003 | 2013+370 | 3mm_ddc | o  | o  | o  | x  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_004 | No0004 | CYG_A    | 3mm_ddc | o  | o  | 94 | x  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_005 | No0005 | 2013+370 | 3mm_ddc | o  | x  | o  | o  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_006 | No0006 | CYG_A    | 3mm_ddc | o  | x  | 94 | o  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_007 | No0007 | 2013+370 | 3mm_ddc | o  | x  | o  | o  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_008 | No0008 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | 15 | 23 | 23 | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_009 | No0009 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_010 | No0010 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_011 | No0011 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_012 | No0012 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_013 | No0013 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | x  | o  | .  | .  | .  | .  | .  | .  | .  | .  |
| c192c_014 | No0014 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | 98 | o  | .  | .  | .  | .  | .  | .  | .  | .  |

|           |        |          |         |   |   |    |   |   |   |    |    |    |   |   |    |   |   |   |   |   |   |   |
|-----------|--------|----------|---------|---|---|----|---|---|---|----|----|----|---|---|----|---|---|---|---|---|---|---|
| c192c_015 | No0015 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_016 | No0016 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_017 | No0017 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_018 | No0018 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_019 | No0019 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_020 | No0020 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_021 | No0021 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_022 | No0022 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_023 | No0023 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_024 | No0024 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_025 | No0025 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | o  | o  | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_026 | No0026 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | o  | 78 | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_027 | No0027 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | o  | 22 | o  | . | . | .  | . | . | . | . | . | . | . |
| c192c_028 | No0028 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | 70 | 70 | 62 | . | . | .  | . | . | . | . | . | . | . |
| c192c_029 | No0029 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | o  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_030 | No0030 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_031 | No0031 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_032 | No0032 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_033 | No0033 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_034 | No0034 | CYG_A    | 3mm_ddc | o | x | 98 | o | o | o | .  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_035 | No0035 | 2013+370 | 3mm_ddc | o | x | o  | o | o | o | .  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_036 | No0036 | CYG_A    | 3mm_ddc | o | . | 98 | o | o | o | .  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_037 | No0037 | BLLAC    | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | . | . | .  | . | . | . | . | . | . | . |
| c192c_038 | No0038 | 2013+370 | 3mm_ddc | o | . | o  | o | o | o | .  | .  | .  | o | o | 88 | o | o | . | . | . | . | . |
| c192c_039 | No0039 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | . | . | . | . | . |
| c192c_040 | No0040 | 2013+370 | 3mm_ddc | o | . | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | . | . | . | . | . |
| c192c_041 | No0041 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | . | . | . | . | . |
| c192c_042 | No0042 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | x | o | . | . | . |
| c192c_043 | No0043 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_044 | No0044 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_045 | No0045 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_046 | No0046 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_047 | No0047 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_048 | No0048 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_049 | No0049 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_050 | No0050 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_051 | No0051 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_052 | No0052 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_053 | No0053 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_054 | No0054 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_055 | No0055 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_056 | No0056 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_057 | No0057 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_058 | No0058 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_059 | No0059 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_060 | No0060 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_061 | No0061 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_062 | No0062 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_063 | No0063 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |
| c192c_064 | No0064 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | .  | .  | o | o | o  | o | o | o | . | . | . | . |

|           |        |          |         |   |   |    |   |   |   |    |   |    |   |   |   |   |   |    |   |
|-----------|--------|----------|---------|---|---|----|---|---|---|----|---|----|---|---|---|---|---|----|---|
| c192c_065 | No0065 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_066 | No0066 | CYG_A    | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_067 | No0067 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_068 | No0068 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_069 | No0069 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_070 | No0070 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_071 | No0071 | CYG_A    | 3mm_ddc | o | o | 23 | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_072 | No0072 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_073 | No0073 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_074 | No0074 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_075 | No0075 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_076 | No0076 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_077 | No0077 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_078 | No0078 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_079 | No0079 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_080 | No0080 | 3C454.3  | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_081 | No0081 | 2013+370 | 3mm_ddc | o | . | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_082 | No0082 | CYG_A    | 3mm_ddc | o | . | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_083 | No0083 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_084 | No0084 | 2013+370 | 3mm_ddc | . | . | .  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_085 | No0085 | CYG_A    | 3mm_ddc | . | . | .  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_086 | No0086 | 2013+370 | 3mm_ddc | . | . | .  | o | o | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_087 | No0087 | CYG_A    | 3mm_ddc | . | . | .  | o | o | o | .  | . | .  | o | o | o | o | o | 98 | o |
| c192c_088 | No0088 | 2013+370 | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_089 | No0089 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_090 | No0090 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | 96 | x | x  | o | o | o | o | o | o  | o |
| c192c_091 | No0091 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | x | 16 | o | o | o | o | o | o  | o |
| c192c_092 | No0092 | 2013+370 | 3mm_ddc | . | . | .  | . | . | o | o  | x | o  | o | o | o | o | o | o  | o |
| c192c_093 | No0093 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_094 | No0094 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_095 | No0095 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_096 | No0096 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_097 | No0097 | 3C454.3  | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | o |
| c192c_098 | No0098 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_099 | No0099 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_100 | No0100 | 2013+370 | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_101 | No0101 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_102 | No0102 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_103 | No0103 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_104 | No0104 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_105 | No0105 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_106 | No0106 | 2013+370 | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_107 | No0107 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_108 | No0108 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_109 | No0109 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_110 | No0110 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_111 | No0111 | 2013+370 | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_112 | No0112 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_113 | No0113 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | o | o  | o | o | o | o | o | o  | o |
| c192c_114 | No0114 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | o  | o | x  | o | o | o | o | o | o  | o |

|           |        |         |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------|--------|---------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| c192c_115 | No0115 | CYG_A   | 3mm_ddc | . | . | . | . | . | . | o | o | o | x | o | o | o | o | o | o | o | o | o | o | o |
| c192c_116 | No0116 | 3C454.3 | 3mm_ddc | . | . | . | . | . | . | o | o | o | x | o | o | o | o | o | o | o | o | o | o | o |
| c192c_117 | No0117 | 3C454.3 | 3mm_ddc | . | . | . | . | . | . | o | o | o | x | o | o | o | o | o | o | o | o | o | o | o |

**mb011b\_PV.fits:**

|           |        |          |         | EF | PV | YS | ON | MH | GL | KY | KU | KT | NL | FD | PT | LA | BR | OV | KP | MK |   |   |   |
|-----------|--------|----------|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|
| c192c_001 | No0001 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | 09 | 19 | x  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_002 | No0002 | CYG_A    | 3mm_ddc | x  | o  | 96 | 29 | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_003 | No0003 | 2013+370 | 3mm_ddc | o  | o  | o  | x  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_004 | No0004 | CYG_A    | 3mm_ddc | o  | o  | 94 | x  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_005 | No0005 | 2013+370 | 3mm_ddc | o  | x  | o  | o  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_006 | No0006 | CYG_A    | 3mm_ddc | o  | x  | 94 | o  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_007 | No0007 | 2013+370 | 3mm_ddc | o  | x  | o  | o  | o  | o  | x  | x  | x  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_008 | No0008 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | 15 | 23 | 23 | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_009 | No0009 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_010 | No0010 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_011 | No0011 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_012 | No0012 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_013 | No0013 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | x  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_014 | No0014 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | 98 | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_015 | No0015 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_016 | No0016 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_017 | No0017 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_018 | No0018 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_019 | No0019 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_020 | No0020 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_021 | No0021 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_022 | No0022 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_023 | No0023 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_024 | No0024 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_025 | No0025 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_026 | No0026 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | o  | 78 | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_027 | No0027 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | o  | 22 | o  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_028 | No0028 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | 70 | 70 | 62 | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_029 | No0029 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_030 | No0030 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_031 | No0031 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_032 | No0032 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_033 | No0033 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_034 | No0034 | CYG_A    | 3mm_ddc | o  | x  | 98 | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_035 | No0035 | 2013+370 | 3mm_ddc | o  | x  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_036 | No0036 | CYG_A    | 3mm_ddc | o  | .  | 98 | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_037 | No0037 | BLLAC    | 3mm_ddc | o  | o  | o  | o  | o  | o  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | . | . |
| c192c_038 | No0038 | 2013+370 | 3mm_ddc | o  | .  | o  | o  | o  | o  | .  | .  | .  | o  | o  | 88 | o  | o  | .  | .  | .  | . | . | . |
| c192c_039 | No0039 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | .  | .  | .  | o  | o  | o  | o  | o  | .  | .  | .  | . | . | . |
| c192c_040 | No0040 | 2013+370 | 3mm_ddc | o  | .  | o  | o  | o  | o  | .  | .  | .  | o  | o  | o  | o  | o  | .  | .  | .  | . | . | . |
| c192c_041 | No0041 | CYG_A    | 3mm_ddc | o  | o  | 98 | o  | o  | o  | .  | .  | .  | o  | o  | o  | o  | o  | .  | .  | .  | . | . | . |
| c192c_042 | No0042 | 2013+370 | 3mm_ddc | o  | o  | o  | o  | o  | o  | .  | .  | .  | o  | o  | o  | o  | o  | x  | o  | .  | . | . | . |

|           |        |          |         |   |   |    |   |   |   |    |   |    |   |   |   |   |   |    |   |
|-----------|--------|----------|---------|---|---|----|---|---|---|----|---|----|---|---|---|---|---|----|---|
| c192c_043 | No0043 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_044 | No0044 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_045 | No0045 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_046 | No0046 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_047 | No0047 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_048 | No0048 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_049 | No0049 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_050 | No0050 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_051 | No0051 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_052 | No0052 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_053 | No0053 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_054 | No0054 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_055 | No0055 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_056 | No0056 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_057 | No0057 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_058 | No0058 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_059 | No0059 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_060 | No0060 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_061 | No0061 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_062 | No0062 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_063 | No0063 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_064 | No0064 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_065 | No0065 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_066 | No0066 | CYG_A    | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_067 | No0067 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_068 | No0068 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_069 | No0069 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_070 | No0070 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_071 | No0071 | CYG_A    | 3mm_ddc | o | o | 23 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_072 | No0072 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_073 | No0073 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_074 | No0074 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_075 | No0075 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_076 | No0076 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_077 | No0077 | 2013+370 | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_078 | No0078 | CYG_A    | 3mm_ddc | o | o | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_079 | No0079 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_080 | No0080 | 3C454.3  | 3mm_ddc | o | o | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_081 | No0081 | 2013+370 | 3mm_ddc | o | . | o  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_082 | No0082 | CYG_A    | 3mm_ddc | o | . | 98 | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_083 | No0083 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_084 | No0084 | 2013+370 | 3mm_ddc | . | . | .  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_085 | No0085 | CYG_A    | 3mm_ddc | . | . | .  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_086 | No0086 | 2013+370 | 3mm_ddc | . | . | .  | o | o | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_087 | No0087 | CYG_A    | 3mm_ddc | . | . | .  | o | o | o | .  | . | .  | o | o | o | o | o | 98 | o |
| c192c_088 | No0088 | 2013+370 | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_089 | No0089 | BLLAC    | 3mm_ddc | . | . | .  | . | . | o | .  | . | .  | o | o | o | o | o | o  | . |
| c192c_090 | No0090 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | 96 | x | x  | o | o | o | o | o | o  | . |
| c192c_091 | No0091 | CYG_A    | 3mm_ddc | . | . | .  | . | . | o | o  | x | 16 | o | o | o | o | o | o  | . |
| c192c_092 | No0092 | 2013+370 | 3mm_ddc | . | . | .  | . | . | o | o  | x | o  | o | o | o | o | o | o  | . |

