

**CAN (#0411):** Total of 122 orbits.  $\lambda_\Omega = 107^\circ$ ,  $\lambda_g - \lambda_\Omega = 298.1^\circ$ ,  $\beta_g = 32.9^\circ$ ,  $\Delta r = 3^\circ$ ,  $\Delta \lambda_\Omega = 10^\circ$ . CAN may be a combination of two showers at  $\lambda_\Omega = 91^\circ$  to  $103^\circ$  and at  $\lambda_\Omega = 103^\circ$  to  $118^\circ$ .

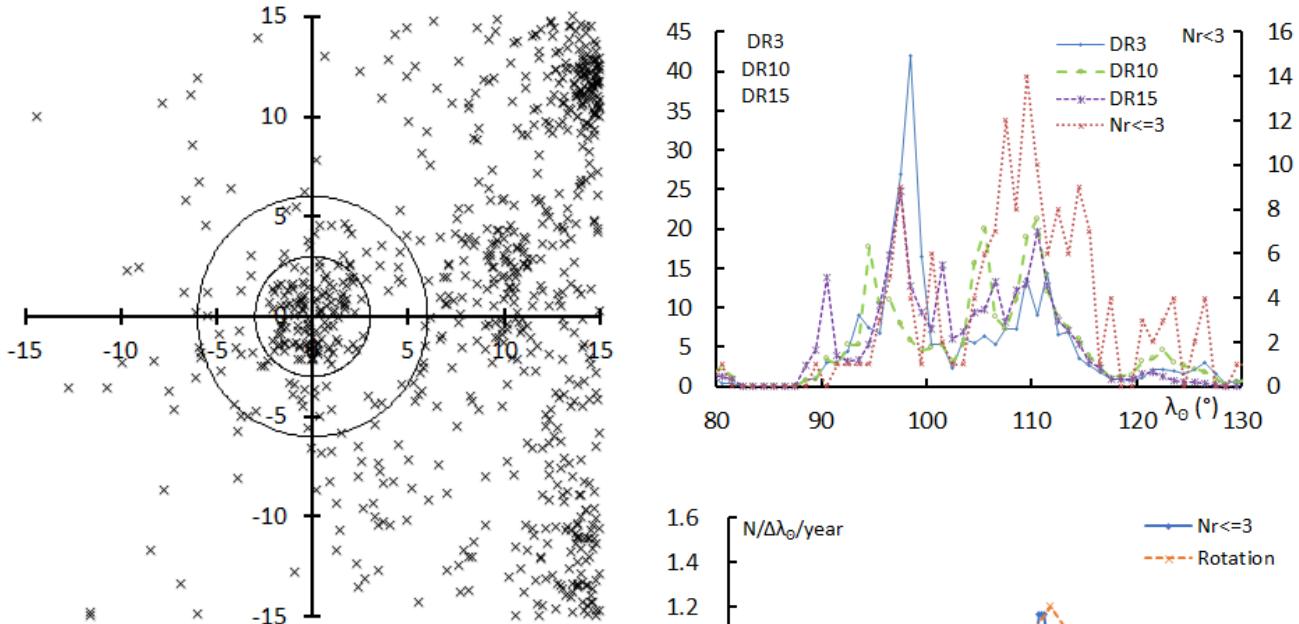


Table 1 – Number per year.

| Year | N  | Year | N  |
|------|----|------|----|
| 2007 | 4  | 2013 | 10 |
| 2008 | 4  | 2014 | 9  |
| 2009 | 8  | 2015 | 11 |
| 2010 | 8  | 2016 | 10 |
| 2011 | 18 | 2017 | 16 |
| 2012 | 9  | 2018 | 15 |

Table 2 – Activity profiles.

|       | $\lambda_\Omega$ | Max  |
|-------|------------------|------|
| Nr<=3 | 109.5            | 14   |
| DR3   | 98.5             | 42.0 |
| DR10  | 110.5            | 21.3 |
| DR15  | 97.5             | 24.8 |

Table 3 – Evolution of the orbital parameters during the activity period.

| $\lambda_\Omega$ | $\lambda_g - \lambda_\Omega$ | $\beta_g$ | $\alpha_g$ | $\delta_g$ | $v_g$ | $e$   | $q$   | $i$   | $\omega$ | $\Omega$ | $\lambda_{II}$ | $\beta_{II}$ | $a$  |
|------------------|------------------------------|-----------|------------|------------|-------|-------|-------|-------|----------|----------|----------------|--------------|------|
| 90               | 297.8                        | 33.1      | 10.8       | 41.1       | 56.4  | 0.887 | 0.684 | 112.0 | 107.7    | 90.0     | 319.6          | 62.0         | 6.07 |
| 91               | 297.8                        | 33.1      | 11.8       | 41.5       | 56.4  | 0.889 | 0.684 | 112.1 | 107.7    | 91.0     | 320.6          | 62.0         | 6.14 |
| 92               | 297.8                        | 33.1      | 12.8       | 41.8       | 56.5  | 0.890 | 0.684 | 112.1 | 107.8    | 92.0     | 321.6          | 61.9         | 6.21 |
| 93               | 297.9                        | 33.1      | 13.8       | 42.2       | 56.5  | 0.891 | 0.684 | 112.1 | 107.8    | 93.0     | 322.5          | 61.9         | 6.28 |
| 94               | 297.9                        | 33.1      | 14.9       | 42.6       | 56.5  | 0.892 | 0.684 | 112.2 | 107.8    | 94.0     | 323.5          | 61.8         | 6.35 |
| 95               | 297.9                        | 33.1      | 15.9       | 43.0       | 56.5  | 0.893 | 0.684 | 112.2 | 107.9    | 95.0     | 324.5          | 61.8         | 6.42 |
| 96               | 297.9                        | 33.1      | 17.0       | 43.4       | 56.6  | 0.895 | 0.684 | 112.2 | 107.9    | 96.0     | 325.5          | 61.8         | 6.49 |
| 97               | 297.9                        | 33.0      | 18.0       | 43.7       | 56.6  | 0.896 | 0.684 | 112.2 | 107.9    | 97.0     | 326.5          | 61.7         | 6.56 |
| 98               | 298.0                        | 33.0      | 19.1       | 44.1       | 56.6  | 0.897 | 0.684 | 112.3 | 108.0    | 98.0     | 327.5          | 61.7         | 6.63 |
| 99               | 298.0                        | 33.0      | 20.2       | 44.5       | 56.6  | 0.898 | 0.684 | 112.3 | 108.0    | 99.0     | 328.4          | 61.6         | 6.71 |
| 100              | 298.0                        | 33.0      | 21.2       | 44.8       | 56.7  | 0.899 | 0.684 | 112.3 | 108.0    | 100.0    | 329.4          | 61.6         | 6.79 |
| 101              | 298.0                        | 33.0      | 22.3       | 45.2       | 56.7  | 0.900 | 0.684 | 112.4 | 108.0    | 101.0    | 330.4          | 61.6         | 6.86 |
| 102              | 298.0                        | 33.0      | 23.4       | 45.6       | 56.7  | 0.901 | 0.684 | 112.4 | 108.1    | 102.0    | 331.4          | 61.5         | 6.94 |
| 103              | 298.0                        | 33.0      | 24.5       | 45.9       | 56.8  | 0.903 | 0.684 | 112.4 | 108.1    | 103.0    | 332.4          | 61.5         | 7.02 |
| 104              | 298.1                        | 33.0      | 25.7       | 46.3       | 56.8  | 0.904 | 0.684 | 112.4 | 108.1    | 104.0    | 333.4          | 61.5         | 7.10 |
| 105              | 298.1                        | 32.9      | 26.8       | 46.6       | 56.8  | 0.905 | 0.684 | 112.5 | 108.2    | 105.0    | 334.4          | 61.4         | 7.18 |
| 106              | 298.1                        | 32.9      | 27.9       | 47.0       | 56.8  | 0.906 | 0.684 | 112.5 | 108.2    | 106.0    | 335.4          | 61.4         | 7.26 |
| 107              | 298.1                        | 32.9      | 29.1       | 47.3       | 56.9  | 0.907 | 0.684 | 112.5 | 108.2    | 107.0    | 336.4          | 61.3         | 7.35 |
| 108              | 298.1                        | 32.9      | 30.2       | 47.7       | 56.9  | 0.908 | 0.684 | 112.5 | 108.2    | 108.0    | 337.3          | 61.3         | 7.43 |
| 109              | 298.1                        | 32.9      | 31.4       | 48.0       | 56.9  | 0.909 | 0.684 | 112.6 | 108.2    | 109.0    | 338.3          | 61.3         | 7.52 |
| 110              | 298.2                        | 32.9      | 32.6       | 48.3       | 56.9  | 0.910 | 0.684 | 112.6 | 108.3    | 110.0    | 339.3          | 61.2         | 7.60 |

Table 3 – Continued, evolution of the orbital parameters during the activity period.

| $\lambda_O$ | $\lambda_g - \lambda_O$ | $\beta_g$ | $\alpha_g$ | $\delta_g$ | $v_g$ | $e$   | $q$   | $i$   | $\omega$ | $\Omega$ | $\lambda_{II}$ | $\beta_{II}$ | $a$  |
|-------------|-------------------------|-----------|------------|------------|-------|-------|-------|-------|----------|----------|----------------|--------------|------|
| 111         | 298.2                   | 32.9      | 33.8       | 48.6       | 57.0  | 0.911 | 0.684 | 112.6 | 108.3    | 111.0    | 340.3          | 61.2         | 7.69 |
| 112         | 298.2                   | 32.8      | 35.0       | 49.0       | 57.0  | 0.912 | 0.684 | 112.6 | 108.3    | 112.0    | 341.3          | 61.2         | 7.78 |
| 113         | 298.2                   | 32.8      | 36.2       | 49.3       | 57.0  | 0.913 | 0.684 | 112.7 | 108.3    | 113.0    | 342.3          | 61.2         | 7.87 |
| 114         | 298.2                   | 32.8      | 37.4       | 49.6       | 57.0  | 0.914 | 0.684 | 112.7 | 108.4    | 114.0    | 343.3          | 61.1         | 7.97 |
| 115         | 298.2                   | 32.8      | 38.7       | 49.9       | 57.1  | 0.915 | 0.684 | 112.7 | 108.4    | 115.0    | 344.3          | 61.1         | 8.06 |
| 116         | 298.3                   | 32.8      | 39.9       | 50.2       | 57.1  | 0.916 | 0.684 | 112.7 | 108.4    | 116.0    | 345.3          | 61.1         | 8.16 |
| 117         | 298.3                   | 32.8      | 41.2       | 50.5       | 57.1  | 0.917 | 0.684 | 112.8 | 108.4    | 117.0    | 346.3          | 61.0         | 8.25 |
| 118         | 298.3                   | 32.8      | 42.4       | 50.8       | 57.1  | 0.918 | 0.683 | 112.8 | 108.4    | 118.0    | 347.3          | 61.0         | 8.35 |
| 119         | 298.3                   | 32.8      | 43.7       | 51.1       | 57.2  | 0.919 | 0.683 | 112.8 | 108.4    | 119.0    | 348.3          | 61.0         | 8.45 |
| 120         | 298.3                   | 32.7      | 45.0       | 51.3       | 57.2  | 0.920 | 0.683 | 112.8 | 108.5    | 120.0    | 349.3          | 60.9         | 8.55 |
| 121         | 298.3                   | 32.7      | 46.3       | 51.6       | 57.2  | 0.921 | 0.683 | 112.9 | 108.5    | 121.0    | 350.3          | 60.9         | 8.66 |
| 122         | 298.4                   | 32.7      | 47.6       | 51.9       | 57.2  | 0.922 | 0.683 | 112.9 | 108.5    | 122.0    | 351.3          | 60.9         | 8.76 |
| 123         | 298.4                   | 32.7      | 49.0       | 52.1       | 57.3  | 0.923 | 0.683 | 112.9 | 108.5    | 123.0    | 352.3          | 60.9         | 8.87 |
| 124         | 298.4                   | 32.7      | 50.3       | 52.4       | 57.3  | 0.924 | 0.683 | 112.9 | 108.5    | 124.0    | 353.3          | 60.8         | 8.98 |
| 125         | 298.4                   | 32.7      | 51.6       | 52.6       | 57.3  | 0.925 | 0.683 | 113.0 | 108.5    | 125.0    | 354.3          | 60.8         | 9.09 |