

**DKD (#0336):** Total of **214** orbits.  $\lambda_o = 251.7^\circ$ ,  $\lambda_g - \lambda_o = 243.2^\circ$ ,  $\beta_g = 61.6^\circ$ ,  $\Delta r = 3^\circ$ ,  $\Delta\lambda_o = 5^\circ$ .

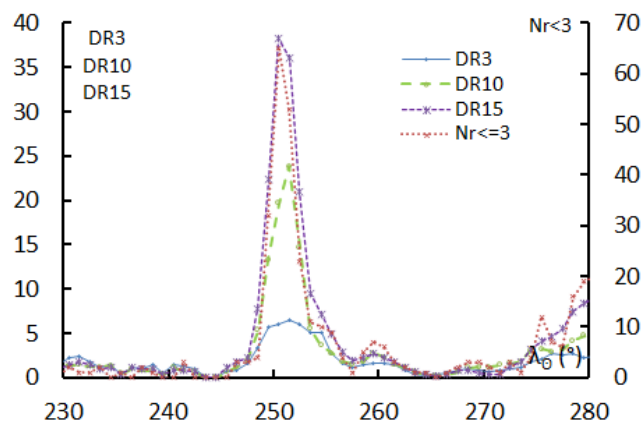
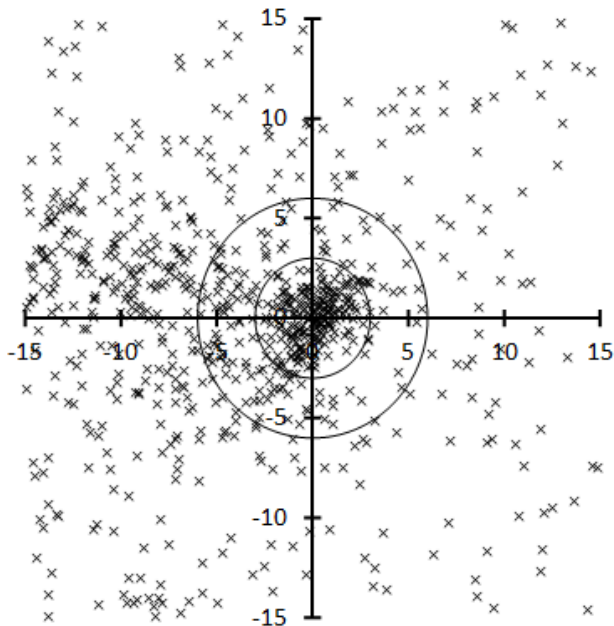


Table 1 – Number per year.

| Year | N  | Year | N  |
|------|----|------|----|
| 2007 | 17 | 2013 | 21 |
| 2008 | 34 | 2014 | 13 |
| 2009 | 15 | 2015 | 20 |
| 2010 | 18 | 2016 | 24 |
| 2011 | 12 | 2017 | 18 |
| 2012 | 16 | 2018 | 6  |

Table 2 – Activity profiles.

|             | $\lambda_o$ | Max  |
|-------------|-------------|------|
| $Nr \leq 3$ | 250.5       | 65   |
| DR3         | 251.5       | 6.5  |
| DR10        | 251.5       | 23.8 |
| DR15        | 250.5       | 38.3 |

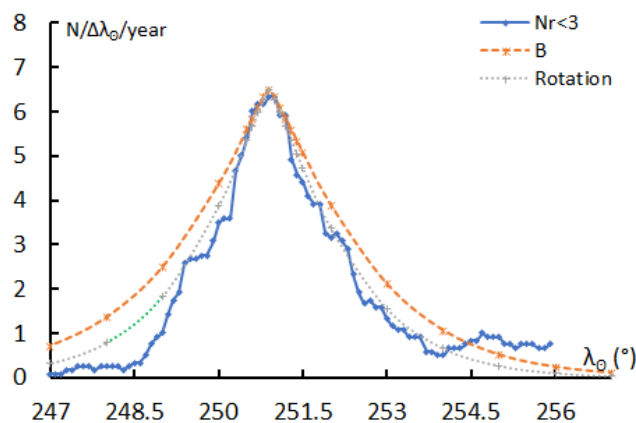


Table 3 – Evolution of the orbital parameters during the activity period.

| $\lambda_o$ | $\lambda_g - \lambda_o$ | $\beta_g$ | $\alpha_g$ | $\delta_g$ | $v_g$ | $e$   | $q$   | $i$  | $\omega$ | $\Omega$ | $\lambda_{\pi}$ | $\beta_{\pi}$ | $a$  |
|-------------|-------------------------|-----------|------------|------------|-------|-------|-------|------|----------|----------|-----------------|---------------|------|
| 247         | 240.7                   | 60.9      | 179.1      | 72.7       | 43.4  | 0.888 | 0.917 | 72.7 | 211.8    | 247.0    | 77.5            | -30.2         | 8.20 |
| 248         | 241.2                   | 61.1      | 181.0      | 72.2       | 43.4  | 0.888 | 0.920 | 72.7 | 211.1    | 248.0    | 78.2            | -29.5         | 8.22 |
| 249         | 241.8                   | 61.3      | 182.8      | 71.7       | 43.4  | 0.888 | 0.922 | 72.7 | 210.4    | 249.0    | 78.9            | -28.9         | 8.24 |
| 250         | 242.3                   | 61.5      | 184.5      | 71.2       | 43.4  | 0.888 | 0.925 | 72.7 | 209.6    | 250.0    | 79.6            | -28.2         | 8.27 |
| 250.5       | 242.6                   | 61.6      | 185.4      | 70.9       | 43.4  | 0.888 | 0.927 | 72.7 | 209.3    | 250.5    | 80.0            | -27.8         | 8.28 |
| 250.6       | 242.7                   | 61.6      | 185.6      | 70.9       | 43.4  | 0.888 | 0.927 | 72.7 | 209.2    | 250.6    | 80.0            | -27.8         | 8.28 |
| 250.7       | 242.7                   | 61.6      | 185.7      | 70.8       | 43.4  | 0.888 | 0.927 | 72.7 | 209.1    | 250.7    | 80.1            | -27.7         | 8.29 |
| 250.8       | 242.8                   | 61.6      | 185.9      | 70.8       | 43.4  | 0.888 | 0.927 | 72.7 | 209.1    | 250.8    | 80.2            | -27.6         | 8.29 |
| 250.9       | 242.8                   | 61.6      | 186.1      | 70.7       | 43.4  | 0.888 | 0.928 | 72.7 | 209.0    | 250.9    | 80.2            | -27.6         | 8.29 |
| 251         | 242.9                   | 61.6      | 186.2      | 70.7       | 43.4  | 0.888 | 0.928 | 72.7 | 208.9    | 251.0    | 80.3            | -27.5         | 8.29 |
| 251.1       | 242.9                   | 61.7      | 186.4      | 70.6       | 43.4  | 0.888 | 0.928 | 72.7 | 208.8    | 251.1    | 80.4            | -27.4         | 8.30 |
| 251.2       | 243.0                   | 61.7      | 186.6      | 70.6       | 43.4  | 0.888 | 0.929 | 72.7 | 208.8    | 251.2    | 80.5            | -27.4         | 8.30 |
| 251.3       | 243.0                   | 61.7      | 186.7      | 70.5       | 43.4  | 0.888 | 0.929 | 72.7 | 208.7    | 251.3    | 80.5            | -27.3         | 8.30 |
| 251.4       | 243.1                   | 61.7      | 186.9      | 70.5       | 43.4  | 0.888 | 0.929 | 72.7 | 208.6    | 251.4    | 80.6            | -27.2         | 8.31 |
| 251.5       | 243.2                   | 61.7      | 187.0      | 70.4       | 43.4  | 0.888 | 0.929 | 72.7 | 208.5    | 251.5    | 80.7            | -27.1         | 8.31 |
| 252         | 243.4                   | 61.8      | 187.9      | 70.1       | 43.4  | 0.888 | 0.931 | 72.7 | 208.2    | 252.0    | 81.0            | -26.8         | 8.33 |
| 253         | 244.0                   | 62.0      | 189.4      | 69.6       | 43.4  | 0.888 | 0.933 | 72.7 | 207.5    | 253.0    | 81.8            | -26.1         | 8.36 |
| 254         | 244.6                   | 62.1      | 191.0      | 69.1       | 43.4  | 0.889 | 0.936 | 72.7 | 206.7    | 254.0    | 82.5            | -25.4         | 8.40 |
| 255         | 245.1                   | 62.3      | 192.5      | 68.6       | 43.4  | 0.889 | 0.938 | 72.7 | 206.0    | 255.0    | 83.2            | -24.7         | 8.45 |
| 256         | 245.7                   | 62.5      | 193.9      | 68.0       | 43.4  | 0.889 | 0.941 | 72.8 | 205.3    | 256.0    | 84.0            | -24.1         | 8.50 |
| 257         | 246.3                   | 62.6      | 195.3      | 67.5       | 43.4  | 0.890 | 0.943 | 72.8 | 204.5    | 257.0    | 84.7            | -23.4         | 8.55 |

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

| $\lambda_{\theta}$ | $\lambda_g - \lambda_{\theta}$ | $\beta_g$ | $\alpha_g$ | $\delta_g$ | $v_g$ | $e$   | $q$   | $i$  | $\omega$ | $\Omega$ | $\lambda_{\Pi}$ | $\beta_{\Pi}$ | $a$  |
|--------------------|--------------------------------|-----------|------------|------------|-------|-------|-------|------|----------|----------|-----------------|---------------|------|
| 258                | 246.9                          | 62.8      | 196.7      | 67.0       | 43.4  | 0.890 | 0.945 | 72.8 | 203.8    | 258.0    | 85.4            | -22.7         | 8.61 |
| 259                | 247.5                          | 62.9      | 198.0      | 66.5       | 43.4  | 0.891 | 0.948 | 72.8 | 203.1    | 259.0    | 86.2            | -22.0         | 8.67 |
| 260                | 248.1                          | 63.1      | 199.4      | 65.9       | 43.4  | 0.891 | 0.950 | 72.8 | 202.3    | 260.0    | 86.9            | -21.3         | 8.73 |
| 261                | 248.7                          | 63.2      | 200.6      | 65.4       | 43.4  | 0.892 | 0.952 | 72.8 | 201.6    | 261.0    | 87.7            | -20.6         | 8.81 |