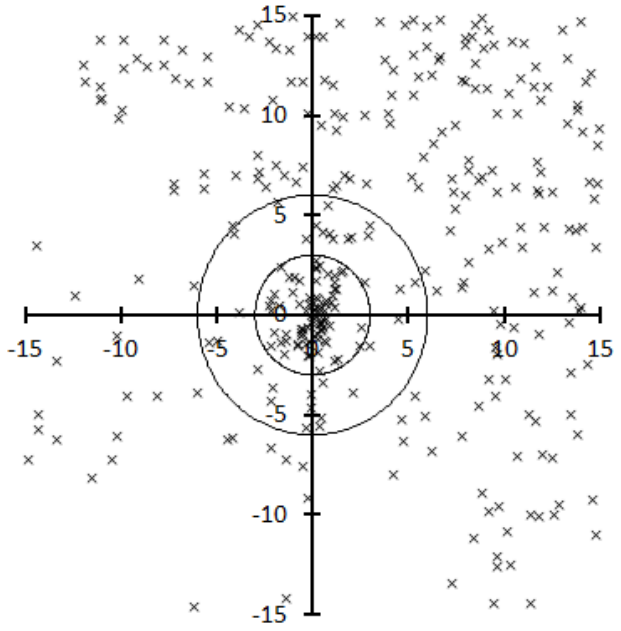
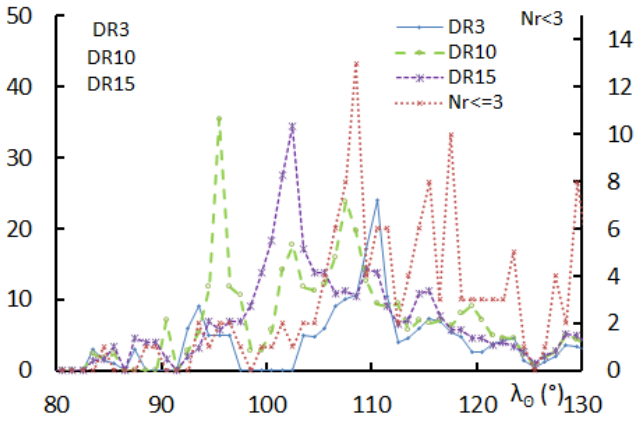
**JXA (#0533):** Total of **81** orbits. $\lambda_\odot$ = 107.3°, $\lambda_g$–$\lambda_\odot$ = 284.8°, $\beta_g$ = –5.1°, $\Delta r$ = 3°, $\Delta\lambda_\odot$ = 10°.





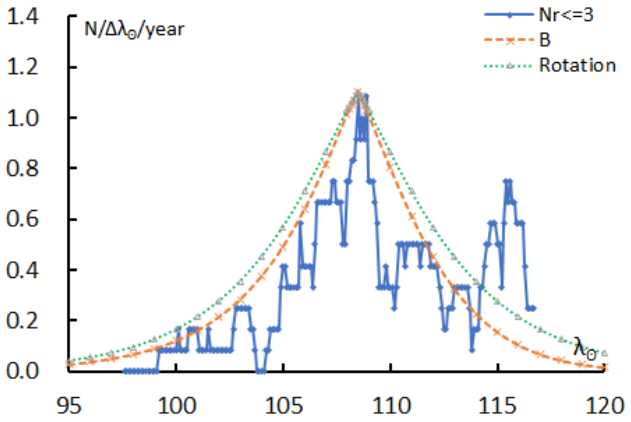




*Table 1* – Number per year.

| Year | N | Year | N |
|---|---|---|---|
| 2007 | 2 | 2013 | 7 |
| 2008 | 2 | 2014 | 3 |
| 2009 | 7 | 2015 | 4 |
| 2010 | 11 | 2016 | 6 |
| 2011 | 14 | 2017 | 9 |
| 2012 | 6 | 2018 | 10 |

*Table 2* – Activity profiles.

| | $\lambda_\odot$ | Max |
|---|---|---|
| Nr<=3 | 108.5 | 13 |
| DR3 | 110.5 | 24.0 |
| DR10 | 95.5 | 35.4 |
| DR15 | 102.5 | 34.4 |

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

| $\lambda_\odot$ | $\lambda_g$–$\lambda_\odot$ | $\beta_g$ | $\alpha_g$ | $\delta_g$ | $v_g$ | $e$ | $q$ | $i$ | $\omega$ | $\Omega$ | $\lambda_\Pi$ | $\beta_\Pi$ | $a$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 287.6 | –6.2 | 23.2 | 3.0 | 67.9 | 0.963 | 0.762 | 168.2 | 299.3 | 275.0 | 335.2 | –10.3 | 20.34 |
| 96 | 287.4 | –6.1 | 23.9 | 3.4 | 67.9 | 0.961 | 0.767 | 168.4 | 299.9 | 276.0 | 335.5 | –10.1 | 19.50 |
| 97 | 287.1 | –6.0 | 24.6 | 3.7 | 68.0 | 0.959 | 0.772 | 168.5 | 300.6 | 277.0 | 335.9 | –9.8 | 18.74 |
| 98 | 286.9 | –6.0 | 25.3 | 4.1 | 68.0 | 0.957 | 0.778 | 168.7 | 301.3 | 278.0 | 336.2 | –9.6 | 18.06 |
| 99 | 286.7 | –5.9 | 26.0 | 4.5 | 68.1 | 0.955 | 0.783 | 168.9 | 301.9 | 279.0 | 336.6 | –9.4 | 17.44 |
| 100 | 286.5 | –5.8 | 26.7 | 4.8 | 68.1 | 0.953 | 0.788 | 169.1 | 302.6 | 280.0 | 336.9 | –9.2 | 16.88 |
| 101 | 286.3 | –5.7 | 27.4 | 5.2 | 68.1 | 0.952 | 0.793 | 169.3 | 303.3 | 281.0 | 337.3 | –8.9 | 16.36 |
| 102 | 286.1 | –5.6 | 28.1 | 5.5 | 68.2 | 0.950 | 0.798 | 169.5 | 304.0 | 282.0 | 337.6 | –8.7 | 15.89 |
| 103 | 285.9 | –5.5 | 28.8 | 5.9 | 68.2 | 0.948 | 0.803 | 169.6 | 304.6 | 283.0 | 337.9 | –8.5 | 15.46 |
| 104 | 285.7 | –5.5 | 29.5 | 6.2 | 68.3 | 0.946 | 0.808 | 169.8 | 305.3 | 284.0 | 338.2 | –8.3 | 15.06 |
| 105 | 285.4 | –5.4 | 30.2 | 6.6 | 68.3 | 0.945 | 0.813 | 170.0 | 306.0 | 285.0 | 338.6 | –8.1 | 14.69 |
| 106 | 285.2 | –5.3 | 30.9 | 6.9 | 68.3 | 0.943 | 0.818 | 170.2 | 306.7 | 286.0 | 338.9 | –7.9 | 14.36 |
| 107 | 285.0 | –5.2 | 31.7 | 7.3 | 68.4 | 0.941 | 0.823 | 170.4 | 307.4 | 287.0 | 339.2 | –7.7 | 14.04 |
| 108 | 284.8 | –5.1 | 32.4 | 7.6 | 68.4 | 0.940 | 0.828 | 170.5 | 308.1 | 288.0 | 339.5 | –7.4 | 13.75 |
| 108.1 | 284.8 | –5.1 | 32.4 | 7.7 | 68.4 | 0.940 | 0.828 | 170.5 | 308.2 | 288.1 | 339.6 | –7.4 | 13.73 |
| 108.2 | 284.8 | –5.1 | 32.5 | 7.7 | 68.4 | 0.939 | 0.829 | 170.6 | 308.2 | 288.2 | 339.6 | –7.4 | 13.70 |
| 108.3 | 284.7 | –5.1 | 32.6 | 7.7 | 68.4 | 0.939 | 0.829 | 170.6 | 308.3 | 288.3 | 339.6 | –7.4 | 13.67 |
| 108.4 | 284.7 | –5.1 | 32.7 | 7.8 | 68.4 | 0.939 | 0.830 | 170.6 | 308.4 | 288.4 | 339.6 | –7.4 | 13.65 |
| 108.5 | 284.7 | –5.1 | 32.7 | 7.8 | 68.4 | 0.939 | 0.830 | 170.6 | 308.4 | 288.5 | 339.7 | –7.3 | 13.62 |
| 108.6 | 284.7 | –5.1 | 32.8 | 7.8 | 68.5 | 0.939 | 0.831 | 170.6 | 308.5 | 288.6 | 339.7 | –7.3 | 13.59 |
| 108.7 | 284.7 | –5.1 | 32.9 | 7.9 | 68.5 | 0.939 | 0.831 | 170.7 | 308.6 | 288.7 | 339.7 | –7.3 | 13.57 |

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

| $\lambda_\odot$ | $\lambda_g$–$\lambda_\odot$ | $\beta_g$ | $\alpha_g$ | $\delta_g$ | $v_g$ | $e$ | $q$ | $i$ | $\omega$ | $\Omega$ | $\lambda_\Pi$ | $\beta_\Pi$ | $a$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 108.8 | 284.6 | –5.1 | 32.9 | 7.9 | 68.5 | 0.939 | 0.832 | 170.7 | 308.7 | 288.8 | 339.8 | –7.3 | 13.54 |
| 108.9 | 284.6 | –5.0 | 33.0 | 7.9 | 68.5 | 0.938 | 0.832 | 170.7 | 308.7 | 288.9 | 339.8 | –7.3 | 13.51 |
| 109 | 284.6 | –5.0 | 33.1 | 8.0 | 68.5 | 0.938 | 0.833 | 170.7 | 308.8 | 289.0 | 339.8 | –7.2 | 13.49 |
| 110 | 284.4 | –5.0 | 33.8 | 8.3 | 68.5 | 0.937 | 0.838 | 170.9 | 309.5 | 290.0 | 340.1 | –7.0 | 13.24 |
| 111 | 284.2 | –4.9 | 34.5 | 8.7 | 68.6 | 0.935 | 0.842 | 171.1 | 310.2 | 291.0 | 340.4 | –6.8 | 13.01 |
| 112 | 284.0 | –4.8 | 35.2 | 9.0 | 68.6 | 0.934 | 0.847 | 171.2 | 310.9 | 292.0 | 340.7 | –6.6 | 12.80 |
| 113 | 283.7 | –4.7 | 36.0 | 9.3 | 68.6 | 0.932 | 0.852 | 171.4 | 311.6 | 293.0 | 341.0 | –6.4 | 12.60 |
| 114 | 283.5 | –4.6 | 36.7 | 9.7 | 68.7 | 0.931 | 0.856 | 171.6 | 312.4 | 294.0 | 341.3 | –6.2 | 12.41 |
| 115 | 283.3 | –4.5 | 37.4 | 10.0 | 68.7 | 0.930 | 0.861 | 171.7 | 313.1 | 295.0 | 341.6 | –6.0 | 12.24 |
| 116 | 283.1 | –4.4 | 38.2 | 10.3 | 68.8 | 0.928 | 0.866 | 171.9 | 313.8 | 296.0 | 341.9 | –5.8 | 12.09 |
| 117 | 282.9 | –4.4 | 38.9 | 10.6 | 68.8 | 0.927 | 0.870 | 172.1 | 314.5 | 297.0 | 342.2 | –5.6 | 11.94 |
| 118 | 282.7 | –4.3 | 39.6 | 11.0 | 68.8 | 0.926 | 0.875 | 172.2 | 315.3 | 298.0 | 342.5 | –5.4 | 11.81 |
| 119 | 282.5 | –4.2 | 40.4 | 11.3 | 68.9 | 0.925 | 0.879 | 172.4 | 316.0 | 299.0 | 342.8 | –5.3 | 11.68 |
| 120 | 282.3 | –4.1 | 41.1 | 11.6 | 68.9 | 0.924 | 0.883 | 172.6 | 316.7 | 300.0 | 343.0 | –5.1 | 11.57 |