

NTA (#0017): Total of **2916** orbits. $\lambda_o = 228^\circ$, $\lambda_g - \lambda_o = 191.7^\circ$, $\beta_g = 2.1^\circ$, $\Delta r = 3^\circ$, $\Delta \lambda_o = 20^\circ$. NTA is different from STA and does not have two components, though it continues to be active longer than STA, $\lambda_o = 200^\circ \sim 260^\circ$.

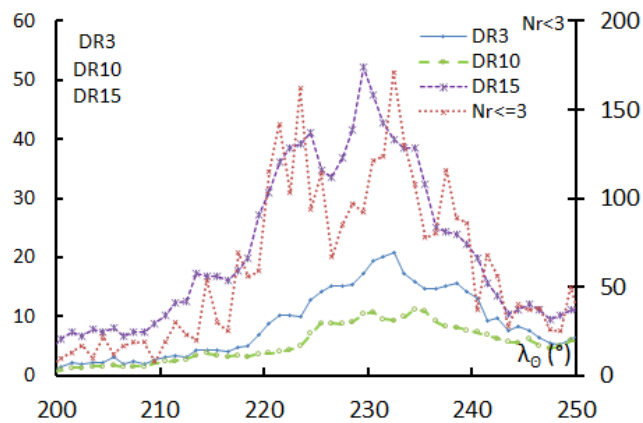
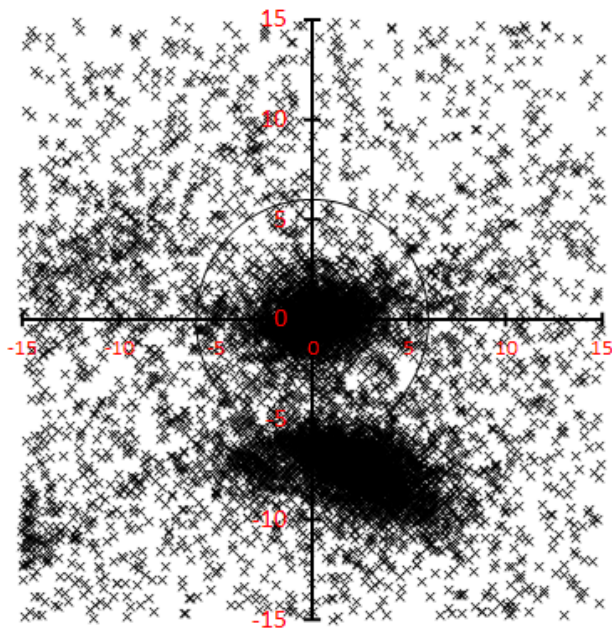


Table 1 – Number per year.

| Year | N | Year | N |
|------|-----|------|-----|
| 2007 | 178 | 2013 | 217 |
| 2008 | 202 | 2014 | 250 |
| 2009 | 273 | 2015 | 163 |
| 2010 | 291 | 2016 | 237 |
| 2011 | 196 | 2017 | 334 |
| 2012 | 272 | 2018 | 303 |

Table 2 – Activity profiles.

| | λ_o | Max |
|-------|-------------|------|
| Nr<=3 | 223.5 | 162 |
| DR3 | 231.5 | 20.5 |
| DR10 | 230.5 | 10.7 |
| DR15 | 229.5 | 52.1 |

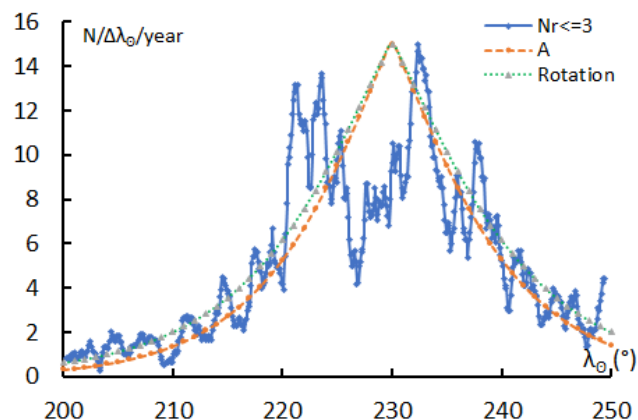


Table 3 – Evolution of the orbital parameters during the activity period.

| λ_o | $\lambda_g - \lambda_o$ | β_g | α_g | δ_g | ν_g | e | q | i | ω | Ω | λ_{π} | β_{π} | a |
|-------------|-------------------------|-----------|------------|------------|---------|-------|-------|-----|----------|----------|-----------------|---------------|------|
| 200 | 199.4 | 2.0 | 36.3 | 16.5 | 32.0 | 0.883 | 0.222 | 3.3 | 311.1 | 200.0 | 151.2 | -2.5 | 1.90 |
| 201 | 199.1 | 2.0 | 37.0 | 16.7 | 31.8 | 0.881 | 0.227 | 3.2 | 310.5 | 201.0 | 151.6 | -2.5 | 1.91 |
| 202 | 198.8 | 2.0 | 37.8 | 17.0 | 31.7 | 0.879 | 0.231 | 3.2 | 309.9 | 202.0 | 152.0 | -2.5 | 1.92 |
| 203 | 198.6 | 2.0 | 38.5 | 17.2 | 31.5 | 0.877 | 0.236 | 3.2 | 309.3 | 203.0 | 152.3 | -2.5 | 1.92 |
| 204 | 198.3 | 2.0 | 39.2 | 17.5 | 31.4 | 0.875 | 0.241 | 3.2 | 308.7 | 204.0 | 152.7 | -2.5 | 1.93 |
| 205 | 198.0 | 2.0 | 39.9 | 17.7 | 31.2 | 0.873 | 0.245 | 3.2 | 308.1 | 205.0 | 153.1 | -2.5 | 1.93 |
| 206 | 197.8 | 2.1 | 40.7 | 17.9 | 31.1 | 0.871 | 0.250 | 3.1 | 307.5 | 206.0 | 153.5 | -2.5 | 1.94 |
| 207 | 197.5 | 2.1 | 41.4 | 18.2 | 30.9 | 0.869 | 0.255 | 3.1 | 306.9 | 207.0 | 153.9 | -2.5 | 1.95 |
| 208 | 197.2 | 2.1 | 42.1 | 18.4 | 30.8 | 0.867 | 0.260 | 3.1 | 306.3 | 208.0 | 154.3 | -2.5 | 1.95 |
| 209 | 197.0 | 2.1 | 42.9 | 18.6 | 30.7 | 0.865 | 0.265 | 3.1 | 305.6 | 209.0 | 154.7 | -2.5 | 1.96 |
| 210 | 196.7 | 2.1 | 43.6 | 18.9 | 30.5 | 0.863 | 0.270 | 3.1 | 305.0 | 210.0 | 155.1 | -2.5 | 1.96 |
| 211 | 196.4 | 2.1 | 44.3 | 19.1 | 30.4 | 0.861 | 0.274 | 3.0 | 304.4 | 211.0 | 155.5 | -2.5 | 1.97 |
| 212 | 196.2 | 2.2 | 45.1 | 19.3 | 30.2 | 0.859 | 0.279 | 3.0 | 303.8 | 212.0 | 155.9 | -2.5 | 1.97 |
| 213 | 195.9 | 2.2 | 45.8 | 19.5 | 30.1 | 0.856 | 0.284 | 3.0 | 303.2 | 213.0 | 156.3 | -2.5 | 1.98 |
| 214 | 195.6 | 2.2 | 46.6 | 19.8 | 29.9 | 0.854 | 0.289 | 3.0 | 302.6 | 214.0 | 156.6 | -2.5 | 1.98 |
| 215 | 195.4 | 2.2 | 47.3 | 20.0 | 29.8 | 0.852 | 0.294 | 3.0 | 302.0 | 215.0 | 157.0 | -2.5 | 1.99 |
| 216 | 195.1 | 2.2 | 48.1 | 20.2 | 29.6 | 0.850 | 0.299 | 2.9 | 301.4 | 216.0 | 157.4 | -2.5 | 2.00 |
| 217 | 194.9 | 2.2 | 48.8 | 20.4 | 29.5 | 0.848 | 0.304 | 2.9 | 300.8 | 217.0 | 157.8 | -2.5 | 2.00 |
| 218 | 194.6 | 2.3 | 49.6 | 20.6 | 29.3 | 0.846 | 0.309 | 2.9 | 300.2 | 218.0 | 158.2 | -2.5 | 2.00 |
| 219 | 194.3 | 2.3 | 50.3 | 20.8 | 29.2 | 0.844 | 0.314 | 2.9 | 299.6 | 219.0 | 158.6 | -2.5 | 2.01 |

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

| λ_o | $\lambda_g - \lambda_o$ | β_g | α_g | δ_g | v_g | e | q | i | ω | Ω | λ_{Π} | β_{Π} | a |
|-------------|-------------------------|-----------|------------|------------|-------|-------|-------|-----|----------|----------|-----------------|---------------|------|
| 220 | 194.1 | 2.3 | 51.1 | 21.0 | 29.0 | 0.842 | 0.319 | 2.9 | 299.0 | 220.0 | 159.0 | -2.5 | 2.01 |
| 221 | 193.8 | 2.3 | 51.8 | 21.2 | 28.9 | 0.839 | 0.324 | 2.9 | 298.4 | 221.0 | 159.4 | -2.5 | 2.02 |
| 222 | 193.5 | 2.3 | 52.6 | 21.4 | 28.7 | 0.837 | 0.329 | 2.8 | 297.8 | 222.0 | 159.8 | -2.5 | 2.02 |
| 223 | 193.3 | 2.3 | 53.4 | 21.6 | 28.6 | 0.835 | 0.334 | 2.8 | 297.2 | 223.0 | 160.2 | -2.5 | 2.03 |
| 224 | 193.0 | 2.3 | 54.1 | 21.8 | 28.5 | 0.833 | 0.339 | 2.8 | 296.6 | 224.0 | 160.6 | -2.5 | 2.03 |
| 225 | 192.7 | 2.4 | 54.9 | 22.0 | 28.3 | 0.831 | 0.344 | 2.8 | 296.0 | 225.0 | 161.0 | -2.5 | 2.04 |
| 226 | 192.5 | 2.4 | 55.7 | 22.1 | 28.2 | 0.829 | 0.349 | 2.8 | 295.4 | 226.0 | 161.4 | -2.5 | 2.04 |
| 227 | 192.2 | 2.4 | 56.4 | 22.3 | 28.0 | 0.827 | 0.354 | 2.8 | 294.8 | 227.0 | 161.8 | -2.5 | 2.04 |
| 228 | 191.9 | 2.4 | 57.2 | 22.5 | 27.9 | 0.824 | 0.360 | 2.8 | 294.2 | 228.0 | 162.2 | -2.5 | 2.05 |
| 229 | 191.7 | 2.4 | 58.0 | 22.7 | 27.7 | 0.822 | 0.365 | 2.7 | 293.6 | 229.0 | 162.6 | -2.5 | 2.05 |
| 230 | 191.4 | 2.4 | 58.7 | 22.8 | 27.6 | 0.820 | 0.370 | 2.7 | 293.0 | 230.0 | 163.0 | -2.5 | 2.06 |
| 231 | 191.1 | 2.5 | 59.5 | 23.0 | 27.4 | 0.818 | 0.375 | 2.7 | 292.4 | 231.0 | 163.4 | -2.5 | 2.06 |
| 232 | 190.9 | 2.5 | 60.3 | 23.2 | 27.3 | 0.816 | 0.380 | 2.7 | 291.8 | 232.0 | 163.8 | -2.5 | 2.06 |
| 233 | 190.6 | 2.5 | 61.1 | 23.3 | 27.1 | 0.814 | 0.385 | 2.7 | 291.2 | 233.0 | 164.2 | -2.5 | 2.07 |
| 234 | 190.3 | 2.5 | 61.9 | 23.5 | 27.0 | 0.811 | 0.390 | 2.7 | 290.6 | 234.0 | 164.6 | -2.5 | 2.07 |
| 235 | 190.1 | 2.5 | 62.6 | 23.6 | 26.8 | 0.809 | 0.395 | 2.6 | 290.0 | 235.0 | 165.0 | -2.5 | 2.07 |
| 236 | 189.8 | 2.5 | 63.4 | 23.8 | 26.7 | 0.807 | 0.400 | 2.6 | 289.4 | 236.0 | 165.4 | -2.5 | 2.07 |
| 237 | 189.5 | 2.5 | 64.2 | 23.9 | 26.5 | 0.805 | 0.405 | 2.6 | 288.8 | 237.0 | 165.8 | -2.5 | 2.08 |
| 238 | 189.3 | 2.6 | 65.0 | 24.0 | 26.4 | 0.803 | 0.410 | 2.6 | 288.2 | 238.0 | 166.3 | -2.5 | 2.08 |
| 239 | 189.0 | 2.6 | 65.8 | 24.2 | 26.3 | 0.800 | 0.416 | 2.6 | 287.6 | 239.0 | 166.7 | -2.5 | 2.08 |
| 240 | 188.8 | 2.6 | 66.6 | 24.3 | 26.1 | 0.798 | 0.421 | 2.6 | 287.1 | 240.0 | 167.1 | -2.5 | 2.08 |
| 241 | 188.5 | 2.6 | 67.4 | 24.4 | 26.0 | 0.796 | 0.426 | 2.6 | 286.5 | 241.0 | 167.5 | -2.5 | 2.09 |
| 242 | 188.2 | 2.6 | 68.2 | 24.6 | 25.8 | 0.794 | 0.431 | 2.5 | 285.9 | 242.0 | 167.9 | -2.4 | 2.09 |
| 243 | 188.0 | 2.6 | 69.0 | 24.7 | 25.7 | 0.791 | 0.436 | 2.5 | 285.3 | 243.0 | 168.3 | -2.4 | 2.09 |
| 244 | 187.7 | 2.6 | 69.8 | 24.8 | 25.5 | 0.789 | 0.441 | 2.5 | 284.7 | 244.0 | 168.7 | -2.4 | 2.09 |
| 245 | 187.4 | 2.7 | 70.6 | 24.9 | 25.4 | 0.787 | 0.446 | 2.5 | 284.1 | 245.0 | 169.2 | -2.4 | 2.09 |
| 246 | 187.2 | 2.7 | 71.4 | 25.0 | 25.2 | 0.784 | 0.451 | 2.5 | 283.6 | 246.0 | 169.6 | -2.4 | 2.09 |
| 247 | 186.9 | 2.7 | 72.2 | 25.1 | 25.1 | 0.782 | 0.456 | 2.5 | 283.0 | 247.0 | 170.0 | -2.4 | 2.09 |
| 248 | 186.6 | 2.7 | 73.0 | 25.2 | 24.9 | 0.780 | 0.461 | 2.5 | 282.4 | 248.0 | 170.4 | -2.4 | 2.10 |
| 249 | 186.4 | 2.7 | 73.8 | 25.3 | 24.8 | 0.778 | 0.466 | 2.4 | 281.8 | 249.0 | 170.8 | -2.4 | 2.10 |
| 250 | 186.1 | 2.7 | 74.6 | 25.4 | 24.6 | 0.775 | 0.471 | 2.4 | 281.3 | 250.0 | 171.3 | -2.4 | 2.10 |
| 251 | 185.8 | 2.7 | 75.4 | 25.5 | 24.5 | 0.773 | 0.476 | 2.4 | 280.7 | 251.0 | 171.7 | -2.4 | 2.10 |
| 252 | 185.6 | 2.8 | 76.2 | 25.6 | 24.3 | 0.770 | 0.481 | 2.4 | 280.1 | 252.0 | 172.1 | -2.4 | 2.10 |
| 253 | 185.3 | 2.8 | 77.0 | 25.7 | 24.2 | 0.768 | 0.486 | 2.4 | 279.5 | 253.0 | 172.5 | -2.4 | 2.10 |
| 254 | 185.0 | 2.8 | 77.8 | 25.8 | 24.0 | 0.766 | 0.491 | 2.4 | 279.0 | 254.0 | 173.0 | -2.3 | 2.10 |
| 255 | 184.8 | 2.8 | 78.6 | 25.8 | 23.9 | 0.763 | 0.496 | 2.4 | 278.4 | 255.0 | 173.4 | -2.3 | 2.10 |