**Supplementary Table 5:** **Calculation of the volumetric changes.** The medians of cell length (µm) and cell area (µm2) were multiplied for each state and range to calculate the corresponding volume. Absolute and relative changes of the steady (S) and released (R) states were given in comparison to the unreleased (U) state.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Range** | **State** | **Median cell length in µm** | **Median cell area in µm2** | **Volume in µm3** | **absolute Changes to unreleased state** | **relative Changes** **to unreleased state** |
| E | S | 48.51 | 152.03 | 7375 | 1687 | 29.6% |
|  | U | 59.09 | 96.26 | 5688 |  |  |
|   | R | 44.33 | 133.23 | 5906 | 218 | 3.8% |
| SE | S | 65.33 | 311.54 | 20353 | 2451 | 13.7% |
|  | U | 81.76 | 218.95 | 17902 |  |  |
|   | R | 67.58 | 245.69 | 16602 | -1300 | -7.3% |
| 1 | S | 95.65 | 306.19 | 29288 | -4733 | -13.9% |
|  | U | 111.55 | 304.97 | 34021 |  |  |
|   | R | 85.75 | 325.14 | 27881 | -6139 | -18.0% |
| 2 | S | 122.84 | 271.35 | 33334 | -18716 | -36.0% |
|  | U | 131.28 | 396.49 | 52051 |  |  |
|   | R | 148.90 | 396.18 | 58991 | 6940 | 13.3% |
| 3 | S | 130.97 | 349.28 | 45743 | -37 | -0.1% |
|  | U | 107.01 | 427.81 | 45780 |  |  |
|   | R | 125.60 | 423.53 | 53194 | 7414 | 16.2% |
| 4 | S | 86.08 | 378.00 | 32539 | -2423 | -6.9% |
|  | U | 90.59 | 385.95 | 34962 |  |  |
|   | R | 103.63 | 416.96 | 43210 | 8248 | 23.6% |
| 5 | S | 84.77 | 341.79 | 28974 | 1423 | 5.2% |
|  | U | 85.38 | 322.69 | 27550 |  |  |
|   | R | 103.46 | 368.99 | 38176 | 10626 | 38.6% |
| 6 | S | 73.84 | 316.89 | 23399 | -619 | -2.6% |
|  | U | 74.93 | 320.55 | 24019 |  |  |
|   | R | 101.91 | 307.41 | 31328 | 7309 | 30.4% |
| 7 | S | 70.42 | 317.80 | 22381 | -4019 | -15.2% |
|  | U | 73.78 | 357.83 | 26400 |  |  |
|   | R | 98.10 | 337.36 | 33096 | 6696 | 25.4% |
| 8 | S | 73.35 | 280.83 | 20598 | -1164 | -5.4% |
|  | U | 73.80 | 294.88 | 21762 |  |  |
|   | R | 99.77 | 297.33 | 29665 | 7903 | 36.3% |
| 9 | S | 78.68 | 238.05 | 18729 | -2415 | -11.4% |
|  | U | 75.21 | 281.13 | 21144 |  |  |
|   | R | 106.01 | 288.16 | 30548 | 9404 | 44.5% |
| 10 | S | 87.80 | 204.43 | 17950 | 994 | 5.9% |
|  | U | 82.02 | 206.72 | 16956 |  |  |
|   | R | 118.31 | 212.38 | 25126 | 8170 | 48.2% |
| 2 - 10 | U |   |   | 270624 |   |   |
|   | R |   |   | 343334 | 72709 | 26.9% |