Table S1: Volume of water, air and sand in the 0-32 µm microenvironment of the cyanobacterial bundle (in nL).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Distance | Water | Air | Sand |
| 42 min | 0-4 µm  | 62.2 | 26.4 | 11.4 |
|  | 4-8 µm | 51.9 | 30.2 | 18 |
|  | 8-12 µm | 53.3 | 28.9 | 17.9 |
|  | 12-16 µm | 45.2 | 31 | 23.8 |
|  | 16-20 µm | 46.9 | 29.9 | 23.3 |
|  | 20-24 µm | 40.5 | 31.1 | 28.4 |
|  | 24-28 µm | 42.1 | 30.1 | 27.7 |
|  | 28-32 µm | 36.9 | 30.9 | 32.3 |
|   |  |  |  |  |
| 51 min | 0-4 µm  | 49.2 | 42.3 | 8.5 |
|  | 4-8 µm | 38.6 | 48.9 | 12.6 |
|  | 8-12 µm | 38.7 | 47.8 | 13.6 |
|  | 12-16 µm | 30 | 51.3 | 18.6 |
|  | 16-20 µm | 31.3 | 49.5 | 19.1 |
|  | 20-24 µm | 24.6 | 51.4 | 24 |
|  | 24-28 µm | 26.3 | 49.6 | 24.1 |
|  | 28-32 µm | 21.1 | 50.4 | 28.5 |
|   |  |  |  |  |
| 61 min | 0-4 µm  | 19.1 | 65.5 | 15.5 |
|  | 4-8 µm | 13.8 | 65.4 | 20.8 |
|  | 8-12 µm | 14.7 | 64.8 | 20.5 |
|  | 12-16 µm | 11 | 63.7 | 25.3 |
|  | 16-20 µm | 12 | 63 | 25 |
|  | 20-24 µm | 9.3 | 61.3 | 29.4 |
|  | 24-28 µm | 10.3 | 60.7 | 29 |
|  | 28-32 µm | 8.1 | 58.8 | 33.1 |
|   |  |  |  |  |
| 91 min | 0-4 µm  | 0 | 96.9 | 3.1 |
|  | 4-8 µm | 0 | 92.4 | 7.6 |
|  | 8-12 µm | 0 | 92.3 | 7.7 |
|  | 12-16 µm | 0 | 87.8 | 12.2 |
|  | 16-20 µm | 0 | 87.6 | 12.4 |
|  | 20-24 µm | 0 | 82.9 | 17.1 |
|  | 24-28 µm | 0 | 82.8 | 17.2 |
|  | 28-32 µm | 0 | 78.2 | 21.8 |