**Supplementary Materials**

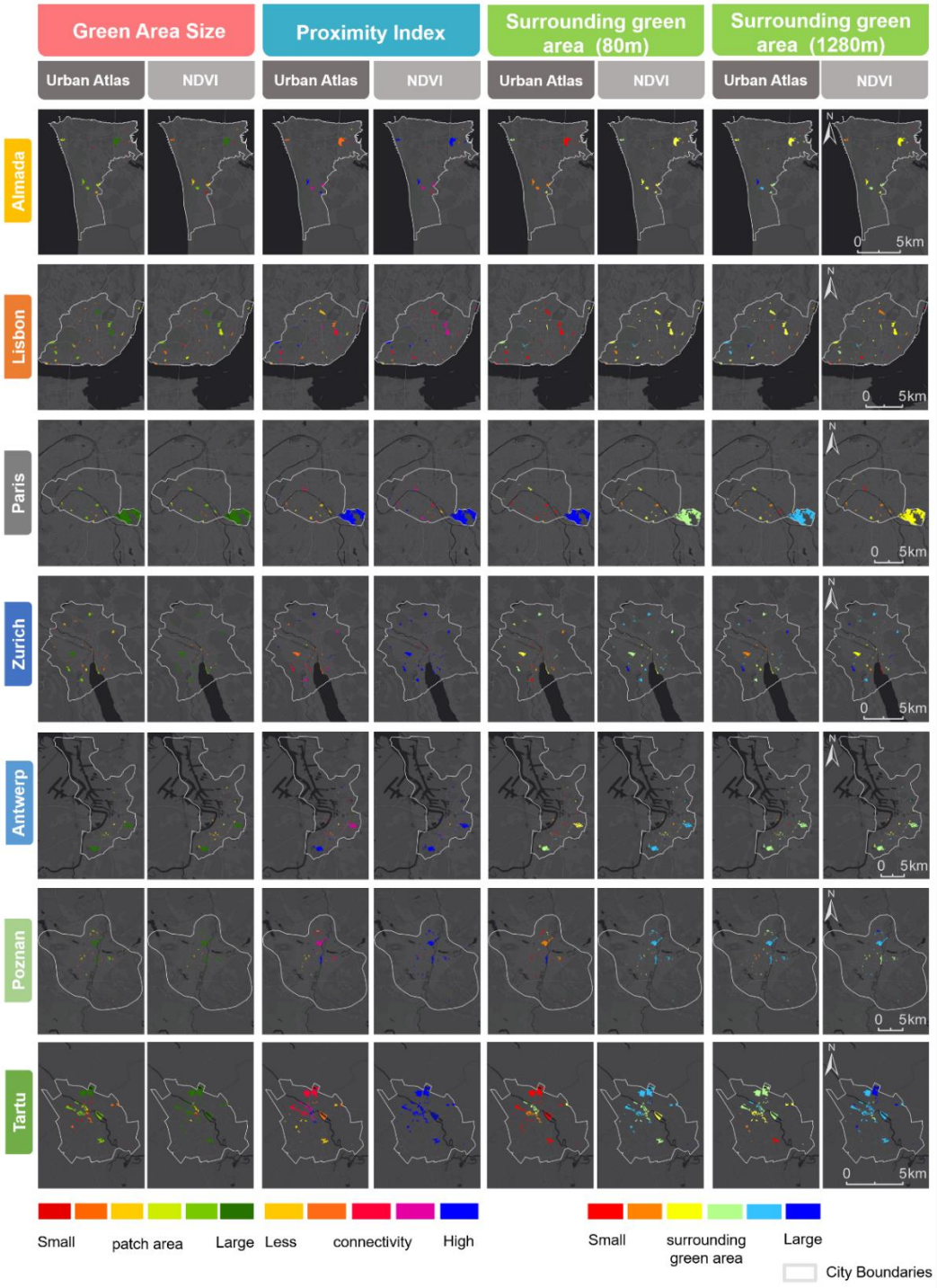


**Figure S1.** Spatial distribution of all urban landscape metrics using land cover classification (the Urban Atlas) and spectral data (NDVI). Note that the spatial scale is different in cities.

**Table S1:** A descriptive analysis of Urban Atlas LULC classes in the studied cities. * LULC classes considered in the study.

| Urban Atlas 2012 Types | Almada | | | Lisbon | | | Paris | | | Zurich | | | Antwerp | | | Poznan | | | Tartu | | | All Cities | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Area (ha) | % in city | Mean NDVI | Total Area (ha) | % in city | Mean NDVI | Total Area (ha) | % in city | Mean NDVI | Total Area (ha) | % in city | Mean NDVI | Total Area (ha) | % in city | Mean NDVI | Total Area (ha) | % in city | Mean NDVI | Total Area (ha) | % in city | Mean NDVI | Total Area (ha) | Mean NDVI |
| Continuous urban fabric (S.L.: > 80%) | 872 | 12.46 | 0.17 | 1764 | 20.31 | 0.15 | 4544 | 43.31 | 0.07 | 256 | 2.78 | 0.19 | 1770 | 7.90 | 0.26 | 1985 | 7.74 | 0.41 | 425 | 10.95 | 0.52 | 11579 | 0.15 |
| Discontinuous dense urban fabric (S.L.: 50% - 80%) | 769 | 10.99 | 0.28 | 855 | 9.85 | 0.28 | 155 | 1.48 | 0.38 | 976 | 10.61 | 0.42 | 1344 | 6.00 | 0.45 | 3215 | 12.54 | 0.55 | 702 | 18.08 | 0.64 | 7975 | 0.43 |
| Discontinuous medium density urban fabric (S.L.: 30% - 50%) | 366 | 5.23 | 0.39 | 239 | 2.75 | 0.36 | 3 | 0.03 | 0.55 | 1418 | 15.41 | 0.55 | 637 | 2.84 | 0.59 | 286 | 1.12 | 0.64 | 119 | 3.07 | 0.72 | 3083 | 0.49 |
| Discontinuous low density urban fabric (S.L.: 10% - 30%) * | 215 | 3.08 | 0.46 | 81 | 0.94 | 0.43 | - | - | - | 177 | 1.92 | 0.60 | 555 | 2.48 | 0.73 | 38 | 0.15 | 0.66 | 8 | 0.21 | 0.70 | 1009 | 0.52 |
| Discontinuous very low density urban fabric (S.L.: < 10%) * | 31 | 0.45 | 0.40 | 7 | 0.08 | 0.41 | - | - | - | 16 | 0.17 | 0.60 | 194 | 0.87 | 0.81 | 54 | 0.21 | 0.50 | 4 | 0.11 | 0.53 | 247 | 0.52 |
| Isolated structures | 22 | 0.32 | 0.39 | 2 | 0.03 | 0.50 | - | - | - | 16 | 0.17 | 0.67 | 18 | 0.08 | 0.73 | 52 | 0.20 | 0.64 | 10 | 0.26 | 0.73 | 118 | 0.57 |
| Industrial. commercial. public. military and private units | 554 | 7.91 | 0.26 | 1633 | 18.80 | 0.21 | 1405 | 13.39 | 0.19 | 990 | 10.77 | 0.32 | 1521 | 6.78 | 0.30 | 3860 | 15.06 | 0.37 | 758 | 19.52 | 0.34 | 10704 | 0.28 |
| Port areas | 121 | 1.73 | 0.13 | 115 | 1.33 | 0.05 | - | - | - | 2 | 0.02 | 0.22 | 4350 | 19.41 | 0.17 | - | - | - | - | - | - | 4587 | 0.10 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Airports | - | - | - | 310 | 3.57 | 0.10 | 9 | 0.08 | 0.46 | - | - | - | 54 | 0.24 | 0.61 | 274 | 1.07 | 0.50 | 0 | 0.00 | 0.77 | 661 | 0.20 |
| Mineral extraction and dump sites | 20 | 0.29 | 0.22 | 11 | 0.12 | 0.29 | 5 | 0.05 | 0.23 | 6 | 0.06 | 0.25 | 83 | 0.37 | 0.46 | 62 | 0.24 | 0.49 | 23 | 0.59 | 0.55 | 191 | 0.34 |
| Construction sites | 47 | 0.67 | 0.30 | 49 | 0.56 | 0.29 | 52 | 0.49 | 0.11 | 57 | 0.62 | 0.30 | 32 | 0.14 | 0.41 | 117 | 0.45 | 0.40 | 69 | 1.79 | 0.50 | 433 | 0.35 |
| Land without current use | 107 | 1.53 | 0.38 | 90 | 1.03 | 0.35 | 6 | 0.06 | 0.36 | 30 | 0.32 | 0.59 | 86 | 0.38 | 0.62 | 287 | 1.12 | 0.63 | 23 | 0.59 | 0.63 | 634 | 0.51 |
| Green urban areas * | 467 | 6.67 | 0.57 | 642 | 7.39 | 0.53 | 1706 | 16.26 | 0.68 | 448 | 4.87 | 0.72 | 804 | 3.59 | 0.83 | 1918 | 7.48 | 0.79 | 249 | 6.41 | 0.79 | 6229 | 0.62 |
| Sports and leisure facilities | 261 | 3.73 | 0.46 | 332 | 3.83 | 0.30 | 607 | 5.79 | 0.47 | 412 | 4.47 | 0.58 | 342 | 1.53 | 0.58 | 1174 | 4.58 | 0.68 | 82 | 2.11 | 0.70 | 3207 | 0.47 |
| Arable land (annual crops) | 466 | 6.65 | 0.39 | 122 | 1.41 | 0.33 | - | - | - | 351 | 3.81 | 0.59 | 1282 | 5.72 | 0.62 | 4071 | 15.88 | 0.50 | 84 | 2.17 | 0.72 | 6344 | 0.55 |
| Permanent crops (vineyards. fruit trees. olive groves) | 40 | 0.57 | 0.40 | 19 | 0.22 | 0.32 | - | - | - | 80 | 0.87 | 0.68 | - | - | - | - | - | - | - | - | - | 140 | 0.56 |
| Pastures | 443 | 6.34 | 0.40 | 172 | 1.98 | 0.33 | - | - | - | 421 | 4.58 | 0.71 | 1256 | 5.60 | 0.75 | 3132 | 12.22 | 0.70 | 628 | 16.19 | 0.74 | 6040 | 0.62 |
| Forests * | 867 | 12.38 | 0.67 | 663 | 7.63 | 0.74 | - | - | - | 2133 | 23.19 | 0.91 | 883 | 3.94 | 0.87 | 2859 | 11.16 | 0.88 | 218 | 5.61 | 0.89 | 7551 | 0.76 |
| Herbaceous vegetation associations | 546 | 7.80 | 0.46 | 100 | 1.16 | 0.39 | - | - | - | 55 | 0.60 | 0.69 | 31 | 0.14 | 0.55 | - | - | - | 35 | 0.91 | 0.69 | 806 | 0.50 |
| Open spaces with little or no vegetation | 37 | 0.53 | 0.08 | - | - | - | - | - | - | - | - | - | 2 | 0.01 | 0.32 | - | - | - | 1 | 0.03 | 0.35 | 42 | 0.22 |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wetlands | 1 | 0.01 | 0.71 | 2 | 0.03 | 0.01 | - | - | - | 6 | 0.07 | 0.75 | 24 | 0.11 | 0.65 | - | - | - | 44 | 1.13 | 0.71 | 78 | 0.62 |
| Water | 13 | 0.19 | -0.11 | 37 | 0.43 | -0.23 | 249 | 2.37 | -0.33 | 136 | 1.48 | 0.04 | 4084 | 18.22 | -0.52 | 539 | 2.10 | 0.01 | 75 | 1.93 | 0.13 | 5561 | 0.11 |
| Other roads and associated land | 640 | 9.14 | 0.23 | 1195 | 13.76 | 0.20 | 1484 | 14.14 | 0.15 | 597 | 6.49 | 0.33 | 1287 | 5.74 | 0.29 | 1225 | 4.78 | 0.41 | 285 | 7.35 | 0.46 | 6692 | 0.31 |
| Fast transit roads and associated land | 58 | 0.83 | 0.19 | 74 | 0.85 | 0.27 | 11 | 0.10 | 0.27 | 71 | 0.77 | 0.20 | 454 | 2.02 | 0.48 | 110 | 0.43 | 0.45 | - | - | - | 769 | 0.29 |
| Railways and associated land | 23 | 0.33 | 0.19 | 102 | 1.18 | 0.09 | 258 | 2.46 | 0.06 | 199 | 2.17 | 0.17 | 955 | 4.26 | 0.22 | 373 | 1.45 | 0.49 | 38 | 0.99 | 0.47 | 1950 | 0.25 |

**Table S2.** Earth observation data used to determine urban green areas in European cities involved.

| City | Sensor | Resolution | Date | Cloud Coverage | Coordinate System |
|---|---|---|---|---|---|
| **Almada** | Sentinel 2A | 10 m | 14/07/2017 11:30:33 | 0.2754 % | WGS 1984 – UTM 29N |
| **Lisbon** | | | 14/07/2017 11:21:14 | 0.0000 % | WGS 1984 – UTM 29N |
| **Paris** | | | 27/08/2017 11:04:48 | 5.8191 % | WGS 1984 – UTM 31N |
| **Zürich** | | | 06/07/2017 10:23:01 | 6.5441 % | WGS 1984 – UTM 32N |
| **Antwerp** | | | 26/05/2017 10:55:18 | 0.0000 % | WGS 1984 – UTM 31N |
| **Poznan** | | | 30/07/2017 10:05:35 | 0.0000 % | WGS 1984 – UTM 33N |
| **Tartu** | | | 30/08/2017 09:33:31 | 0.1469 % | WGS 1984 – UTM 35N |