Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: The city-level soil organic carbon density and soil organic carbon stock of urban

greenspaces for mid- and large cities (urban population > 0.5 million)

ID: ID of the predicted cities

Lat: Latitude (°) Lon: Longitude (°)

City: Name of the predicted cities

Country: Country of the predicted cities Continent: Continent of the predicted cities USGA: Total urban green space area (km²)

SOCD: Predicted soil organic carbon density (0-20 cm) (Mg/ha)

SOCS: Predicted soil organic carbon stock (0-20 cm) (Tg)

File Name: Supplementary Data 2

Description: The national-level soil organic carbon density and soil organic carbon stock of

urban greenspaces

ID: ID of the predicted cities

Country: Country

UA: Total urban built-up area (km²)

USGA: Total urban green space area (km²)

SOCD: Predicted soil organic carbon density (0-20 cm) (Mg/ha)

SOCS: Predicted soil organic carbon stock (0-20 cm) (Tg)

File Name: Supplementary Data 3 Description: The SOC-U dataset

ID: ID of the urban greenspace sites City: Name of the sampled cities Country: Country of the sampled cities

Continent: Continent of the sampled cities

Lat: Latitude (°)
Lon: Longitude (°)

Climate: Climate type of the sampled cities

Sampling year: Soil sampling year

Depth: Soil depth (cm)

Landuse: Dominant landuse type of the sampled sites

Dominant vegetation: Dominant vegetation type of the sampled sites

Elevation: Elevation of the sampled cities (m)

MAT: Mean annual temperature (°C) MAP: Mean annual precipitation (mm)

Temperature seasonality: Temperature seasonality (10-2 °C)

Precipitation seasonality: Precipitation seasonality (%)

PD: Urban population density (people/km2)

GDPP: Gross domestic product per capita (USD)

UGI: Urban greenness index UHI: Urban heat island index (°C)

pH: Soil pH

Clay: Soil clay fraction (%)

TN: Soil total nitrogen concentration (g/kg)
TP: Soil total phosphorus concentration (g/kg)

BD: Soil bulk density (g/cm3)

SOCC: Soil organic carbon concentration (g/kg) SOCD: Soil organic carbon density (Mg/ha)

SOCD20: Soil organic carbon density (0-20 cm) (Mg/ha)

Reference: Original literature

Site number: Number of the sampled sites