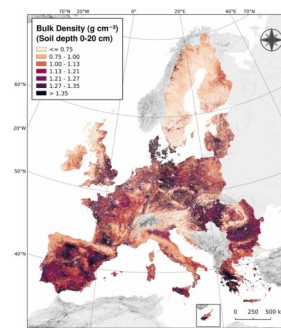


Soil Bulk density in Europe

In the LUCAS 2018 soil survey, bulk density has been analysed at different depths, i.e. at 0–10 cm and 10–20 cm. By applying a Cubist model, we spatialised the circa 6,000 LUCAS samples and developed a high-resolution map (100 m) of bulk density for the 0–20 cm depth and also maps at 0–10 cm and 10–20 cm. The modelling results as described in the peer-reviewed [publication](#) show a very good prediction ($R^2:0.66$) of bulk density for the 0–20 cm map, which outperforms previous assessments. The bulk density maps were then used to estimate packing density which is a proxy to estimate soil compaction; to this end, clay content was also used. The full dataset includes the bulk density maps for Europe for 0–20 cm, 0–10 cm and 10–20 cm and also the packing density estimation. Also the point data measurements of bulk density are made part of the dataset. Data available:



<https://esdac.jrc.ec.europa.eu/content/soil-bulk-density-europe>

Pesticides residues in European agricultural soils

This dataset contains the results of a study targeting residues of active ingredients of pesticides used as crop protection products in soil samples collected from the 2018 LUCAS survey. This dataset is an output of a [study](#) providing a comprehensive characterization of the extent of residues of active ingredients from pesticides in the soils of the EU (118 substances for 3473 sites). Data are reported at (regional) NUTS2 level due to data protection requirements under the EU General Data Protection Regulation (GDPR). The data are available from:



<https://esdac.jrc.ec.europa.eu/content/pesticides-residues-european-agricultural-soils>

Sign the Soil Mission Manifesto

The EU Mission Soil Manifesto was launched in April 2023 to highlight the urgent need for action to restore and protect soil health in Europe and to support the [Mission Soil](#) objectives. It represents a key step for further local engagement by mobilising regions, municipalities, businesses, policy makers and other stakeholders, as well as citizens. The Manifesto aims to foster local knowledge, innovation, and investment in soil health by raising awareness. Signatories of the Manifesto will be able to join a vibrant soil health advocacy community and have access to the latest research results. This non-legally binding document can be signed in the name of organizations, but also as individual. The Manifesto, [available in all EU languages](#), has so far received 2,700 signatures, including 430 legal entities, publicly visible in the dedicated webpage. To sign the Manifesto and join the Mission Soil community, click below.



<https://mission-soil-platform.ec.europa.eu/community/mission-soil-manifesto>

11th European Modelling Workshop on pesticides

In the context of ESDAC collaboration with EFSA and DG SANTE through FOCUS and PERSAM, we maintain within ESDAC a pesticides modelling section which is an entry point to information that comes from the European Environmental Modelling of Pesticides Workshops that have been organized over the last 10 years. The scope of the workshops, initiated in 2001, is to provide a forum to discuss scientific and regulatory issues related to pesticide fate and exposure modelling at the European level among scientists from academic, industrial and regulatory backgrounds. We just added an entry for the 11th European Modelling Workshop, held in Montpellier in September 2023. Whilst the focus was on pesticide fate and behavior in the first workshops, scientists from the eco-toxicological effect modelling were invited to the last workshops to join the developments in different areas of environmental risk assessment of pesticides.

Toxicokinetic-toxicodynamic models for survival: input data and evaluation

<https://esdac.jrc.ec.europa.eu/projects/pesticides-modelling>

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