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Temporary Dataset Download: Soil Profile Analytical Database 2

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Type of Organization	Research Organization
-- Other	
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Purpose	This research aims to map and analyze the spatiotemporal dynamics of soil organic carbon (SOC) in the black soil region of Northeast China around 2010. The requested dataset will be used exclusively for academic, non-profit research as training and validation labels for machine learning-based SOC inversion models. Specifically, the data will support: (1) extracting multi-source environmental covariates (climate, terrain, remote sensing) at sample locations; (2) training and validating random forest / XGBoost models to predict topsoil (0–20 cm) SOC distribution at 30 m resolution; and (3) assessing the impact of environmental drivers on SOC spatial patterns. All results will be published in peer-reviewed academic journals. The data will not be redistributed, sold, or used for commercial purposes. Proper citation and acknowledgment of the data source will be provided in all resulting publications.
Notes	

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25. The following Annexes form an intergral part of this Licence Agreement: ANNEX 1: Specification of SPADE2v1.1 Database and reports
26. LICENSEE ACKNOWLEDGES TO HAVE READ, UNDERSTOOD AND AGREED TO BE BOUND BY THE ABOVE-MENTIONED TERMS AND CONDITIONS OF THE CONTRACT

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ANNEX 1: SPECIFICATION OF SPADE2v11 DATABASE AND REPORTS

1. The SPADE-2 Version 1.1 database, comprises one data file: SPADE2v11.dbf.
2. SPADE2v11.dbf is the harmonised soil profile data for Soil Typological Units (STU) for use with the SGDBE. It contains data for the STUs that comprise the Soil Map Units (SMU) that cover Belgium, Bulgaria, Denmark, Estonia, Finland, France (part), Germany, Hungary, Republic of Ireland (part), Italy, Luxembourg, Netherlands, Portugal, Romania, Slovakia, Spain (part), Switzerland, and United Kingdom.

3. SPADE2v11.dbf is in dBASE-IV format and can also be viewed using Microsoft Excel. However for spatial representation or analysis, the SPADE-2 data must be linked to the geometric component of the ESDB, the SGDBE, using the SMU and STU codes. Details of how this can be achieved are included in the SPADE2v11 report.
4. The SPADE-2 Report accompanying the SPADE2 version 1.1 database is SPADE-2_Beta_Report.pdf

References:

Reference of source (Citations) :

1. Hollis, J.M., Jones, R.J.A., Marshall, C.J., Holden, A., Van de Veen, J.R. and Montanarella, L. (2006). SPADE-2: The soil profile analytical database for Europe, version 1.0. European Soil Bureau Research Report No.19, EUR 22127 EN, 38pp. Office for Official Publications of the European Communities, Luxembourg.
2. Hannam J.A., Hollis, J.M., Jones, R.J.A., Bellamy, P.H., Hayes, S.E., Holden, A., Van Liedekerke, M.H. and Montanarella, L. (2009). SPADE-2: The soil profile analytical database for Europe, Version 2.0 Beta Version March 2009. Unpublished Report, 27pp.

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