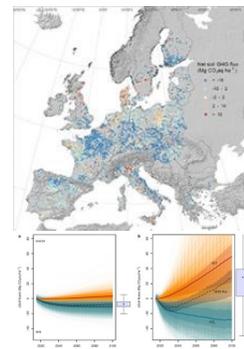


### Soil GHG fluxes using LUCAS soil-DayCent

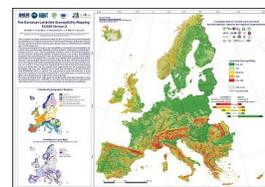
We ran the state-of-the-art biogeochemistry model DayCent on approximately 8,000 soil sampling locations, classified as arable, from the most extensive harmonized land use and soil inventory network for the EU (LUCAS survey). The model was driven by measured soil characteristics and complemented with updated datasets, including a RPC4.5 climate change scenario. Our main idea was to quantify the net soil GHG fluxes, simulating two representative mitigating practice options starting in 2016, in comparison with a baseline of current agricultural practices. The first scenario was an integrated crop residue retention and lower soil disturbance management (IRS) while, the second saw the introduction of N fixing cover crops incorporated before the successive main crop (CC), generally referred to as 'green manure'. JRC has published a study in [Nature Climate Change](#) showing that soils can be a net sink of greenhouse gases through increased storage of organic carbon. The data are available in ESDAC:



<https://esdac.jrc.ec.europa.eu/content/soil-ghg-fluxes-using-lucas-soil-daycent>

### European Landslide Susceptibility Map version 2 (ELSUS v2)

This new update of the European Landslide Susceptibility Map shows levels of spatial probability of landslide occurrence covering 37 European countries at 200 m cell size. The map has been generated through spatial multi-criteria evaluation modelling using pan-European datasets on slope angle, shallow subsurface lithology and land cover, along with more than 149,000 landslide locations for model calibration, and map validation and classification. ELSUS v2 has been produced jointly by BGR (Hannover, Germany), CNR-IRPI (Perugia, Italy), CNRS-EOST (Strasbourg, France) and JRC (Ispra, Italy), and is freely available for download from the European Soil Data Centre (ESDAC):



<https://esdac.jrc.ec.europa.eu/content/european-landslide-susceptibility-map-elsus-v2>

### Laboratory skills course in soil biology and Biochemistry (LAMDMARK)

Venue: 4-8 June 2018 in Wageningen University & Research. The course will include training in soil quality parameters such as labile C, microresp – respiration, extracellular enzyme activity, nematode and enchytraeid extraction and basics of identification. Earthworm sampling and identification.



### **Invitations to contribute on Special Issues**

A Special Issue on [Soil Organic Carbon and its influence on agricultural and environmental effects](#) is open for contributions in Agronomy (E. Lugato). A Special issue on "Soil Erosion by Water" is open in Water MDPI. Another Special issue on the workshops of soil erosion modelling (Ispra, Seoul) is open in [Environmental Research](#) (P. Panagos).



### 2018 ESSC International Conference: Soil and Water Security

To celebrate 30 years of activities the ESSC is organizing the SoWaSe-ESSC International Conference on 'Soil and Water Security: Challenges for the next 30 years!'. The Conference will be celebrated in **Imola (Italy)** from **6-8 June 2018**. The objective is to stimulate reflections on the importance of environmental resources for humankind, paying special attention to the new challenges and opportunities concerning Soil and Water Security and Conservation for the next 30 years.



<https://events.unibo.it/sowase-essc-conference-imola2018>

#### **More Details**

**Download the ESDAC Newsletter:** [PDF Format](#). **Feedback:** [panos.panagos@ec.europa.eu](mailto:panos.panagos@ec.europa.eu)

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