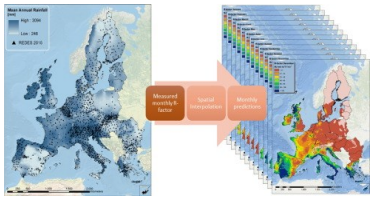
JOINT RESEARCH CENTRE
EUROPEAN SOIL DATA CENTRE (ESDAC)
ESDAC: http://esdac.jrc.ec.europa.eu ESDAC Newsletter No **99** (March 2017)

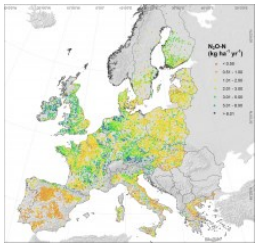
Monthly and seasonal rainfall erosivity in Europe



The development of the Rainfall Erosivity Database at European Scale (REDES) and its 2015 update with the extension to monthly component allowed to develop monthly and seasonal R -factor maps and assess rainfall erosivity both spatially and temporally. During winter months, significant rainfall erosivity is present only in part of the Mediterranean countries. A sudden increase of erosivity occurs in a major part of European Union in May and the highest values are registered during summer months. Starting from September, the R-factor has a decreasing trend. The monthly erosivity maps allowed the development of indicators for studying the intra-annual variability of erosivity and the concentration of erosive events. Data are available in ESDAC: 12 monthly R-factor maps, 4 seasonal erosivity maps, Erosivity ratio, Coefficient of Variation, Weighted Density, Month with highest/lowest R-factor.

http://esdac.jrc.ec.europa.eu/themes/monthly-erosivity

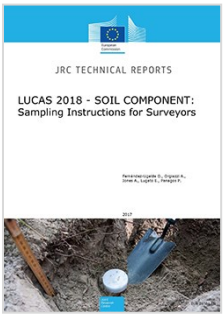
N_2O emissions from agricultural soils in Europe



This dataset is derived from the integration of the LUCAS soil survey data with the bio-geochemistry process-based model DayCent. The model was ran for more than 11,000 LUCAS sampling points under agricultural use, assessing also the model uncertainty. Meta-models based on model outcomes and the Random Forest algorithm were used to upscale the N_2O emissions at 1km resolution. ESDAC makes available a) Average nitrous oxides emissions: contains the average (2010-2014 time period) emissions of N_2O-N (kg ha^{-1} yr^{-1}) simulated in soil LUCAS points; b) Nitrous oxides emissions in agricultural soils of the EU: contains the N_2O-N emissions (kg ha^{-1} yr^{-1}) at 1 km^2 resolution in the EU, obtained by the meta-model MT1 and MT2.

http://esdac.jrc.ec.europa.eu/content/n2o-emissions-agricultural-soils

LUCAS 2018 - SOIL COMPONENT: Sampling Instructions for Surveyors



In 2018, a new soil sampling campaign will be carried out within the LUCAS framework. Soil samples will be taken in repeated points of LUCAS 2009/2012 and LUCAS 2015. The novelty of the survey is that new physical, chemical and biological parameters will be analysed. Key parameters for evaluating soil quality, such as bulk density and soil biodiversity, will be analysed. Furthermore, field measurements such as the thickness of organic layer in peat soils, and visual assessment of signs of soil erosion will be carried out in 2018.This technical report compiles the instructions for collecting the various soil samples and for performing field measurements in the soil survey of 2018. These instructions will be used for all LUCAS surveyors to create a comparable database of soil characteristics all over Europe.

http://esdac.jrc.ec.europa.eu/public_path/shared_folder/doc_pub/JRC105923_LUCAS2018_JRCTechnicalReport.pdf

1st World Conference on soil and water conservation under global change (CONSOWA)

A joint Conference of the "International Soil Conservation Organization" (19th ISCO), the "World Association for Soil and Water Conservation" (WASWAC), the "European Society for Soil Conservation" (8th ESSC Congress), the "International Union of Soil Science (IUSS-), the Soil and Water Conservation Society (SWCS), the "International Erosion Control Association" (IECA) and the "World Association for Sedimentation and Erosion Research" (WASER) in parallel with the Simposio Nacional sobre Control de la Degradación y Restauración de Suelos (SECS).

Venue: 12-16 June 2017, Lleida (Spain) http://www.consowalleida2017.com/

More Details

Download the ESDAC Newsletter: PDF Format. **Feedback**: panos.panagos@ec.europa.eu

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