Summary

The European Union wide Nomenclature of Territorial Units for Statistics or NUTS includes several spatial levels (NUTS 0, NUTS 1, NUTS 2 and NUTS 3) for each country and has been managed by Eurostat under a series of agreements with the Member States. These NUTS classifications can undergo changes over time (e.g. the regional unit can be merged or divided)[1]. For example, a NUTS 2 level region can be modified or merged with another region, creating new regions in the process. The reporting of crop yield requires a spatial reference system that is spatially consistent through time. Therefore, a procedure was developed to map and link the various NUTS version (i.e. 2006, 2009, 2013, 2016) towards the 2016 NUTS classification, which is used as the reference for the dataset published here.

The details of this procedure are documented in the JRC report 'Algorithm for the disaggregation of crop area statistics in the MARS crop yield forecasting system' (Cerrani et al., 2023). The purpose of this report is to provide weights at grid and administrative levels based on harvested areas for each crop allowing the spatial aggregation or disaggregation of any crop indicator based on crop area. In order to obtain harmonized and continues yield time series throughout the years, a crop area weighing system for each crop in each subnational region is used to recalculate yield values with respect to the NUTS 2016 classification.

The data sources for the calculation of weight system are: 1) Regional statistics from Eurostat (Table REGIO from db Cronos). 2) Regional statistics from national statistical services. 3) Country-level statistics provided by DG-AGRI. 4) Land cover data from Corine Land Cover (used in weight calculation when no other statistical data is available). In the report, the set of rules and mathematical operations underpinning this procedure are defined.

1) https://ec.europa.eu/eurostat/web/nuts/history

Cerrani, I., Ronchetti, G., Nisini Scacchiafichi, L., Lopez Lozano, R., and Van der Velde, M.: Algorithm for the disaggregation of crop area statistics in the MARS crop yield forecasting system, Ispra: European Commission, 2023.

https://agri4cast.jrc.ec.europa.eu/DataPortal/Resource_Files/SupportFiles/36/Rationale.zip