

# European Irrigation Map for the year 2010 (EIM2010)

**Version** 1.3

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## PROPERTIES

**Creator** Food Security Unit of the Joint Research Center (JRC.D.5)

**Publisher** Joint Research Centre European Commission

**Description** The European Irrigation Map for the year 2010 (EIM2010) dataset presents the distribution of irrigated crops in Europe in year 2010 in 10 km x 10km spatial resolution. The following irrigated crop classes are included:

- CEREALS (cereals excluding maize and rice)
- MAIZE (grain and green)
- PULSES
- POTATOES
- SUGARBEET
- TURNIPRAPE (rape and turnip rape)
- SUNFLOWER
- FIELDVEGE (field vegetables, melons, strawberries)
- GRASS (temporary and permanent)
- FRUITBERRY (fruit and berry orchards)
- VINES (vineyards)
- CITRUS (citrus orchards)
- OLIVES (olive orchards)
- RICE.

Additionally, two distinctive classes are provided for irrigated areas (without crop differentiation):

1. IA (area irrigated at least once a year)
2. TIA (total irrigable area, defined as area equipped for irrigation, following classification of Eurostat 2010.
3. DIFFTIAIA (difference between TIA and IA)

The EIM2010 was obtained by disaggregating regional-level (NUTS2) statistics on irrigated areas by crop type, collected during the Farm Structure Survey 2010 (EUROSTAT 2010) into the EEA reference grid

of 10 km (Europe shapefile 10 km, EEA 2013). The irrigated crop areas were estimated for individual grid cells, using a methodology described in Zajac et al. 2022. The EIM2010 is distributed in a format of a shapefile. Further discussion of spatial distribution of irrigated crops in the EIM2010 is presented in Zajac et al. 2022.

References:

- EEA, 2013. European Environmental Agency reference grid data: Europe shapefile 10 km. [<https://www.eea.europa.eu/data-and-maps/data/eea-reference-grids-2>]
- EUROSTAT, 2010. Irrigation: number of farms, areas and equipment by size of irrigated area and NUTS 2 regions [ef\_poirrig]. [[https://ec.europa.eu/eurostat/databrowser/view/ef\\_poirrig/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/ef_poirrig/default/table?lang=en)]
- Zajac, Z., Gomez, O., Gelati, E., Velde, M. van der, Bassu, S., Ceglar, A., Chukaliev, O., Panarello, L., Koeble, R., Berg, M. van den, Niemeyer, S., Fumagalli, D., 2022. Estimation of spatial distribution of irrigated crop areas in Europe for large-scale modelling applications. *Agricultural Water Management* 266, 107527. <https://doi.org/10.1016/j.agwat.2022.107527>

**Disclaimer**

The developers/maintainers of this dataset do not have any responsibility on its use and on results/products derived from it.

**DIMENSIONS**

**Spatial Projection**

Lambert Azimuthal Equal Area

**EPSG Code**

3035

**Grid Resolution**

10 km (reference grid EEA, 2013)

**Temporal resolution**

STATIC