

Data underlying the publication: Water Use in Spanish Agriculture (2001–2019): Trends and Impacts of Irrigation Intensification

We provide four datasets supporting the simulation of crop water footprints (WFs) with the process-based gridded crop model ACEA, available through 4TU.ResearchData (<https://doi.org/10.4121/7b45bcc6-686b-404d-a910-13c87156716a.v147>). These include: (i) crop calendars (CSV; provincial; 2014–2016 averages) reporting seeding/flowering and harvest dates for major crops and varieties; (ii) crop harvest area and yields (CSV; provincial; 2001–2022) containing rainfed/irrigated surfaces (ha), yields (kg/ha), and production (tons); (iii) greenhouse crop area and yields (CSV; provincial; 2001–2022) with surface (ha) and yield (kg/ha); and (iv) irrigated area by technology (CSV; national; 2004–2022) specifying surfaces (ha) under drip, sprinkler/aspersion, and furrow systems, as well as their relative shares.

Crop calendar

Format: CSV (comma separated)

Period: average annual value for the period 2014-2016

Resolution: provincial level

Content: average date for flowering and harvesting for perennial crops and seeding and harvest for annual crops, for different crops and varieties.

Crop harvest area and yields

Format: CSV (comma separated)

Period: 2001-2022

Resolution: provincial level

Content: Surface_Rainfed (hectares), Surface_Irrigated (hectares), Yield_Rainfed (kg/ha), Yield_Irrigated (kg/ha), Production (tons (with exceptions))

Crop harvest area and yields Greenhouse Agriculture

Format: CSV (comma separated)

Period: 2001-2022

Resolution: provincial level

Content: Surface (hectares), Yield (kg/ha)

Crop area irrigated with each irrigation technology

Format: CSV (comma separated)

Period: 2004-2022

Resolution: national level

Content: amount of ha irrigated with each irrigated technology (drip, Automotive/Aspersión and Furrow) and the percentage of each over the total irrigated area for each crop.