Soil moisture deficit during the vegetation growing season, annual time-series, 2000-2021, Aug. 2022

The dataset consists of a collection of annual soil moisture (SM) anomalies during the vegetation growing season (GS) for the years 2000-2021 across EEA 38 area and the United Kingdom. The vegetation growing season is defined by EEA´s phenology data series "Vegetation growing season length 2000-2021", available in the EEA website and in this catalogue.

The anomalies are calculated based on the European Commission's Joint Research Centre European Drought Observatory (EDO) Soil Moisture Index (SMI) with respect to the 1995–2019 base period. The yearly start and end of GS periods are dynamic and calculated according to the EEA Phenology Indicators. A positive anomaly indicates that the observed SM was wetter than the long-term SM average for the base period, while a negative anomaly indicates that the observed SM was drier than the reference value. Because SM anomalies are measured in units of standard deviation from the long-term SMI average, they can be used to compare annual deficits/surplus of SM between geographic regions.

EDO is one of the early warning and monitoring systems of the Copernicus Emergency Management Service. As the dataset builds on EDO's SMI, it therefore contains modified Copernicus Emergency Management Service information.

This is version 01.01 of a previous dataset: Soil moisture deficit during the vegetation growing season, annual time-series, 2000-2019, Sep. 2020.

Simple

Date (Creation)	2022-08-11T00:00:00
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Point of contact	Organisation name	Individual name	Electronic mail address	Website	Role
	European Environment Agency		sdi@eea.europa.eu	http://www.eea.europa.eu	Point of contact
	European Environment Agency		sdi@eea.europa.eu		Custodian

Maintenance and update frequency	Annually
GEMET - INSPIRE themes, version 1.0	• Soil
Keywords	
Keywords	
GEMET	• soil moisture • climate change adaptation • drought • land use • environmental pressure • ecosystem degradation
Continents, countries, sea regions of the world.	• EEA38 (from 2020) • United Kingdom
Temporal resolution	• Annually
Spatial scope	• European

EEA topics	- Agriculture and food - Climate adaptation - Soil - Biodiversity
Access constraints	Other restrictions
Other constraints	no limitations to public access
Use constraints	Other restrictions
Other constraints	This dataset is derived from the European Commission's Joint Research Centre European Drought Observatory (EDO) Soil Moisture Index (SMI), which as a component of the Copernicus Emergency Management Service, follows the Terms and Conditions of Access as stated here: https://edo.jrc.ec.europa.eu/edov2/php/index.php?id=1044. As an EEA derived product, the EEA standard re-use policy also applies: unless otherwise indicated, re-use of content on the EEA website for commercial or non-commercial purposes is permitted free of charge, provided that the source is acknowledged (http://www.eea.europa.eu/legal/copyright). Copyright holder: EEA, European Union.
Spatial representation type	Grid
Distance	5 km
Language of dataset	English
Topic category	- Climatology, meteorology, atmosphere - Environment
Begin date	2000-01-01
End date	2021-12-31

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Additional Information	Ticket: #153301
Coordinate reference system identifier	EPSG:3035
Distribution format	• GeoTIFF ( )

OnLine resource	Protocol	Linkage	Name
	EEA:FILEPATH	https://sdi.eea.europa.eu/webdav/datastore/public/eea_r_3035_5_km_smoisture-anomalies-gs-2021_p_2000-2021_v01_r00/	
	WWW:URL	https://sdi.eea.europa.eu/data/0fa3c2b0-cfbc-474a-a96c-1ec86f9cac24	Direct download
	OGC:WMS	https://land.discomap.eea.europa.eu/arcgis/services/Drought/Growing_Season_Mean_Soil_Moisture_2000_2019/MapServer/WMSServer?request=GetCapabilities&service=WMS	
	ESRI:REST	https://land.discomap.eea.europa.eu/arcgis/rest/services/Drought/Growing_Season_Mean_Soil_Moisture_2000_2019/MapServer	

Hierarchy level	Dataset

Conformance result

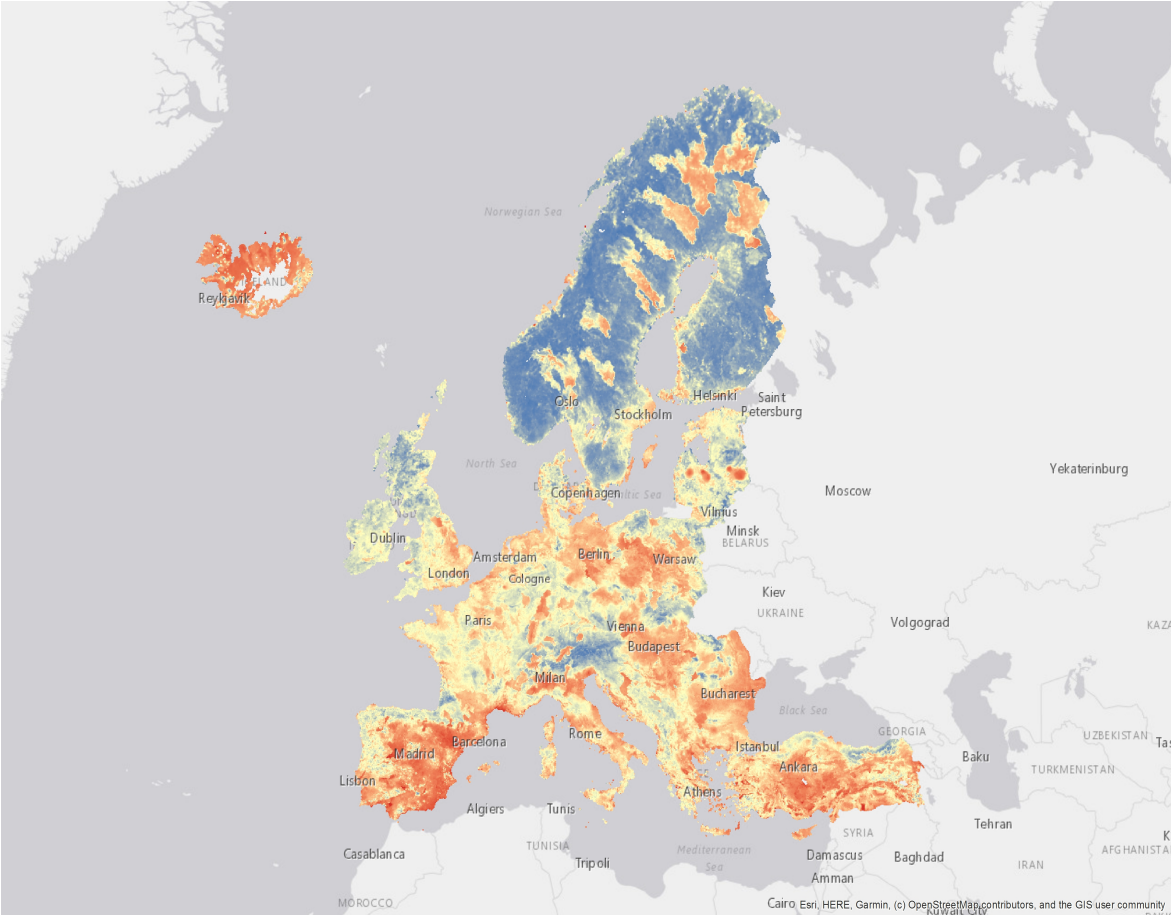| Date (Publication)	2010-12-08
Explanation	See the referenced specification
Statement	Annual soil moisture (SM) anomaly values are calculated based on a time-series of the European Commission's Joint Research Centre European Drought Observatory (EDO) Soil Moisture Index (SMI). The SMI dataset is gridded at 5km spatial resolution and measures the ratio between local wilting point and field capacity of the soil profile on a 10-day temporal frequency. SM anomalies are measured in units of standard deviation from the long-term SMI average (i.e. values are ranging between 0 and 1) with respect to the 1995–2019 base period. More information about the SMI on: https://edo.jrc.ec.europa.eu/documents/factsheets/factsheet_soilmoisture.pdf .
Source	• Annual above ground vegetation season length time-series 2000-2016 - version 1, Aug. 2018 • Soil moisture deficit during the vegetation growing season, annual time-series, 2000-2019, Sep. 2020

Data quality info

No information provided.

Metadata

File identifier	0fa3c2b0-cfbc-474a-a96c-1ec86f9cac24 XML
Metadata language	English

Character set	UTF8
Hierarchy level	Dataset
Date stamp	2023-06-14T11:54:42.169Z
Metadata standard name	ISO 19115/19139
Metadata standard version	1.0

Metadata author					
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Overviews

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