

Medium Resolution Vegetation Phenology and Productivity: Start-of-season date (raster 500m), Oct. 2022

The raster file is the time series of the start of the vegetation growing season. The start of the growing season time-series is based on the time series of the Plant Phenology Index (PPI) derived from the MODIS BRDF-Adjusted Reflectance product (MODIS MCD43 NBAR). The PPI index is optimized for efficient monitoring of vegetation phenology and is derived from the source MODIS data using radiative transfer solutions applied to the reflectance in visible-red and near infrared spectral domains. The start of season indicator is based on calculating the start of the vegetation growing season from the annual PPI temporal curve using the TIMESAT software for each year between and including 2000 and 2021.

The Start-of-Season Date (SOSD), one of the Vegetation Phenology and Productivity (VPP) parameters, is a product of the pan-European High Resolution Vegetation Phenology and Productivity (HR-VPP) component of the Copernicus Land Monitoring Service (CLMS).

The Start-of-Season Date (SOSD) marks the date when the vegetation growing season starts in the time profile of the Plant Phenology Index (PPI). The start-of-season occurs, by definition, when the PPI value reaches 25% of the season amplitude during the green-up period.

The Plant Phenology Index (PPI) is a physically based vegetation index, developed for improving the monitoring of the vegetation growth cycle. The PPI index values, with 5-day satellite revisit cycle, are first used in a function fitting to derive the PPI Seasonal Trajectories. From these Seasonal Trajectories, a suite of 13 Vegetation Phenology and Productivity (VPP) parameters are then computed and provided, for up to two seasons each year. The Start-of-Season Date (SOSD) is one of the 13 parameters. The full list is available in the Product User Manual: https://land.copernicus.eu/user-corner/technical-library/clms_mvpp_pum_d1-0.pdf

The Start-of-Season Date (SOSD) time series dataset is made available as raster files with 500x 500m resolution, in ETRS89-LAEA projection corresponding to the MCD43 tiling grid, for those tiles that cover the EEA38 countries and the United Kingdom and for two seasons in each year from 2000 onwards. It is updated in the first quarter of each year.

The full on-line access to open and free data for this resource will be made available in the second half of 2024. Until then the data will be made available 'on-demand' by filling in the form at: <https://land.copernicus.eu/contact-form>

Simple

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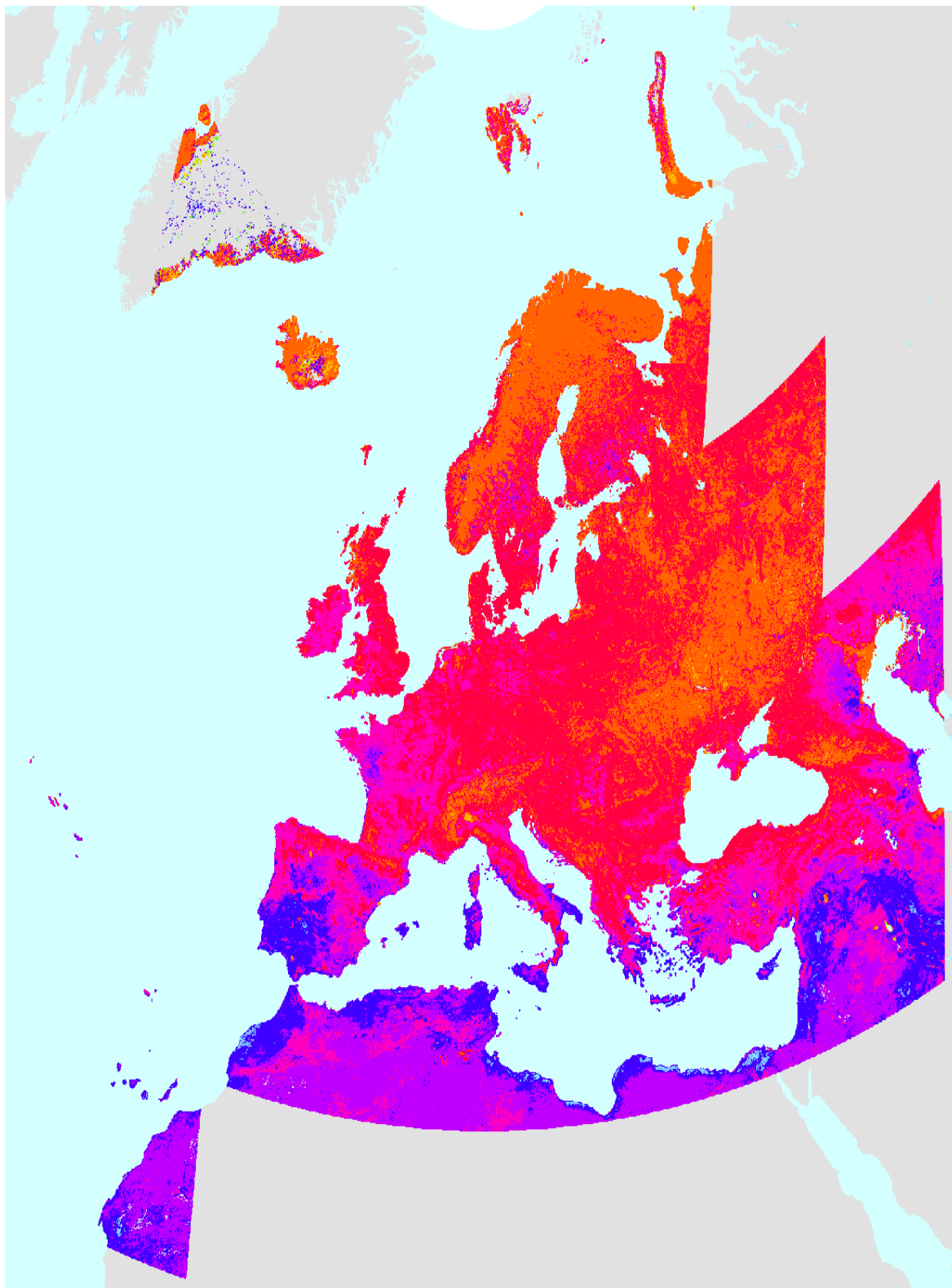
No information provided.

Maintenance and update frequency	Annually
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Environmental monitoring facilities Habitats and biotopes Orthoimagery
Keywords	

Keywords	
GEMET	<ul style="list-style-type: none"> • remote sensing • land • plant ecology • vegetation • index • plant production • productivity
Spatial scope	<ul style="list-style-type: none"> • European
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Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> • United Kingdom • EEA38 (from 2020)
Access constraints	Other restrictions
Other constraints	no limitations to public access
Use constraints	Other restrictions
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Distance	500 m

Language of dataset	English
Character set	UTF8
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Overviews



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