# Trends in annual start of vegetation growing season 2000-2016, version 1, Mar. 2019

The raster file is the temporal trend in the start of the vegetation growing season.

The start of growing season dataset 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 dataset is based on calculating the start of the growing season from the annual PPI temporal curve using the TIMESAT software. Change in the start of growing season was then calculated after fitting a linear trend and extracting the slope of the trend. Negative values refer to earlier start of the vegetation growing season, whereas positive values refer to later start of the vegetation growing season.

## Simple

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| **Date (Publication)** | 2019-03-12 |
| **Date (Creation)** | 2018-08-30 |
| **Edition** | 01.00 |
| **Citation identifier** | eea_r_3035_500_m_p-sos-trend_p_2000-2016_v01_r00 |
| **Citation identifier** | DAT-229-en |

## Point of contact

No information provided.

## Point of contact

No information provided.

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| **Maintenance and update frequency** | As needed |
| **GEMET - INSPIRE themes, version 1.0** | <ul><li>Land use</li><li>Land cover</li><li>Habitats and biotopes</li></ul> |
| **Keywords** | |
| **Keywords** | |
| **GEMET** | <ul><li>vegetation</li><li>trend</li><li>biodiversity</li><li>natural areas, landscape, ecosystems</li><li>biomass</li><li>season</li><li>land cover</li></ul> |
| **Continents, countries, sea regions of the world.** | <ul><li>EEA39</li></ul> |
| **Spatial scope** | <ul><li>European</li></ul> |
| **Temporal resolution** | <ul><li>Annually</li></ul> |
| **EEA Management Plan** | <ul><li>2019 1.8.2</li></ul> |

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| EEA topics | - Agriculture and food<br>- Land use |
| Access constraints | Other restrictions |
| Other constraints | [no limitations to public access](#) |
| Use constraints | Other restrictions |
| Other constraints | EEA standard re-use policy: 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: European Environment Agency (EEA). |
| Aggregate Datasetindentifier | 4635cd57-65d9-47b4-b18e-98a781ef27bb |
| Association Type | Cross reference |
| Aggregate Datasetindentifier | 29ae2d47-7af2-4c09-ba5f-e2fbb7c2b0d1 |
| Association Type | Cross reference |
| Aggregate Datasetindentifier | 42012fdb-4612-41fb-a8f2-a195692ecf24 |
| Association Type | Cross reference |
| Aggregate Datasetindentifier | 1be91ed4-2eb1-46d6-8453-5246c9e9d446 |
| Association Type | Cross reference |
| Spatial representation type | Grid |
| Distance | 500   500 m |
| Language of dataset | English |
| Topic category | - Environment<br>- Biota<br>- Climatology, meteorology, atmosphere |

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| **Begin date** | 2000-01-01 |
| **End date** | 2016-12-31 |
| **Coordinate reference system identifier** | EPSG:3035 |
| **Distribution format** | • GeoTIFF ( 2016 ) |

| **OnLine resource** | **Protocol** | **Linkage** | **Name** |
|---|---|---|---|
| | EEA:FILEPATH | https://sdi.eea.europa.eu/webdav/datastore/public/eea_r_3035_500_m_p-sos-trend_p_2000-2016_v01_r00/ | |
| | WWW:URL | https://sdi.eea.europa.eu/data/f5e0c7e9-7c44-477f-950b-7c092fa0f7a8 | Direct download |
| | ESRI:REST | https://land.discomap.eea.europa.eu/arcgis/rest/services/Phenology/StartOfSeason_2000_2016_trend_day_of_year/ImageServer | |
| | OGC:WMS | https://land.discomap.eea.europa.eu/arcgis/services/Phenology/StartOfSeason_2000_2016_trend_day_of_year/ImageServer/WMSServer?request=GetCapabilities&service=WMS | |

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| **Hierarchy level** | Dataset |

## Conformance result

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| **Date (Publication)** | 2010-12-08 |
| **Explanation** | See the referenced specification |

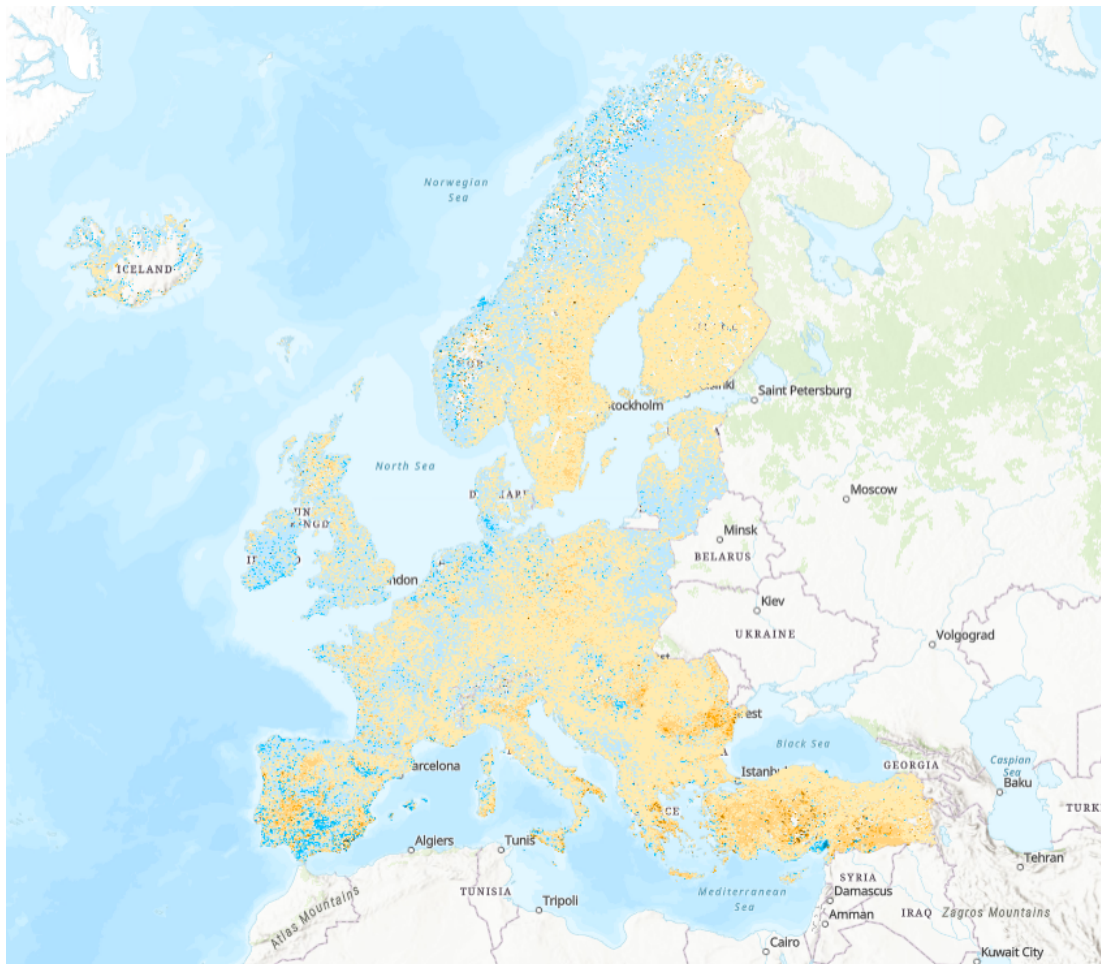| | |
|---|---|
| **Statement** | The dataset computation steps are: |
| | • Calculation of the PPI index from the MODIS MCD43 NBAR product |
| | • Extraction of the start of growing season value (day) from the annual PPI curve for all years between the 2000 – 2016 period. |
| | • Fitting a linear trend over the start of growing season the time series |
| | • Extracting the slope of the linear trend |
| | • Calculation of the start of season change: slope of the linear trend, expressed in day/year. |
| | For detailed methodology of the SOS calculation please see the TIMESAT documentation available at: http://web.nateko.lu.se/timesat/timesat.asp?cat=6 |
| **Source** | • |

## Metadata

| File identifier | f5e0c7e9-7c44-477f-950b-7c092fa0f7a8 <u>XML</u> |
|---|---|
| Metadata language | English |
| Character set | UTF8 |
| Hierarchy level | Dataset |
| Date stamp | 2020-07-10T15:29:40Z |
| Metadata standard name | ISO 19115/19139 |
| Metadata standard version | 1.0 |
| Metadata author | |

| Organisation name | Individual name | Electronic mail address | Website Role |
|---|---|---|---|
| European Environment Agency | | sdi@eea. europa.eu | Point of contact |

## Overviews



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