



Land Surface Temperature with Thermal Condition Index 2017-2021 (raster 5 km), global, 10-daily - version 1

10-day Synthesis Land Surface Temperature (LST10-TCI) provides a statistical overview of the LST over each 10-day compositing for every image pixel. LST10-TCI is useful for the scientific community, namely for those dealing with meteorological and climate models. Accurate values of LST are also of special interest in a wide range of areas related to land surface processes, including meteorology, hydrology, agrometeorology, climatology and environmental studies.

The data are available at global scale in the spatial resolution of about 5 km and covers the period from January 2017 to January 2021 with this version 1.0.

Simple

Identification info

Date (Creation)	2018-01-11	
Date (Publication)	2018-01-11	
Edition	1.0	
Edition date	2018-01-11T00:00:00	
Citation identifier	clms_r_32662_5_km_lst-10daily-tci-global_p_2017-2021_v1_r00	
Citation identifier	clms_global_lst_5km_v1_10daily-tci	
	Title	Instituto Português do Mar e da Atmosfera
	Date (Publication)	2018-01-11

Identifier

Code	10.2909/9143c7a3-5c81-4b0d-b5d1-8cfea8a73d84				
Other citation details	https://land.copernicus.eu/en/products/temperature-and-reflectance/10-daily-land-surface-temperature-thermal-condition-index-global-v1-0-5km				
Purpose	This product is first designed to fit the requirements of the Global Land component of Land Service of GMES-Copernicus. It can be also useful for all applications related to the environment monitoring.				
Credit	LST10-TCI products are generated by the Global Land Service of Copernicus, the Earth Observation programme of the European Commission. The research leading to the current version of the product has received funding from various European Commission Research and Technical Development programs. This product is based on MTSAT/HIMAWARI and GOES data, respectively owned by JMA and NOAA, and combined with the LST product from MSG under copyright EUMETSAT, provided by LSA-SAF.				
Point of contact	Organisation	Individual	Electronic mail address	Website	Role
	European Commission			https://commission.europa.eu	Owner
	Copernicus Land Monitoring Service		JRC-Copernicus-Land@ec.europa.eu	https://land.copernicus.eu	Custodian
	European Commission's Joint Research Centre			https://joint-research-centre.ec.europa.eu/	Publisher

Copernicus Land Monitoring Service
helpdesk

JRC- <https://land.copernicus.eu/en>
Copernicus-
Land@ec. /contact-service-europa.eu [helpdesk](#)

Point of
contact

Spatial representation type

Grid

Spatial resolution

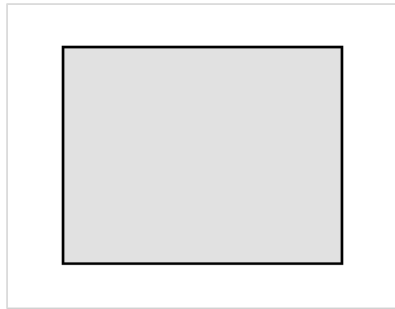
Spatial resolution

0.04464 deg

Topic category

- Climatology, meteorology, atmosphere
- Imagery base maps earth cover

Extent



Extent

Temporal extent

Time period	Instantaneous observation timeslot 2017-01-01T00:00:00Z 2021-01-10T23:59:00Z
Maintenance and update frequency	As needed
mmi:updateScope	Series

Resource format

Title	NetCDF
Alternate title	Network Common Data Form
Date	
Edition	4
EEA topics	<ul style="list-style-type: none"> • Land use
Spatial scope	<ul style="list-style-type: none"> • Global
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> • World
GEMET - INSPIRE themes version 1.0	<ul style="list-style-type: none"> • Orthoimagery
GEMET - Concepts version 3.0	<ul style="list-style-type: none"> • solar radiation

Resource constraints

Access constraints	Other restrictions
Other constraints	no limitations to public access

Resource constraints

Use constraints	Other restrictions
Other constraints	The Copernicus component is governed by Regulation (EU) No 2021/696 of the European Parliament and of the Council of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU. Within the Copernicus component, a portfolio of land monitoring activities has been delegated by the European Union to the European Environment Agency (EEA) and the DG Joint Research Centre of the European Commission.

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2. Where the Copernicus Land Monitoring Service products and services have been adapted or modified by the user, the user shall clearly state this.
3. Users shall make sure not to convey the impression to the public that the user's activities are officially endorsed by the European Union.

Language	English
Character encoding	UTF8
Additional Information	https://land.copernicus.eu/en/products/temperature-and-reflectance/10-daily-land-surface-temperature-thermal-condition-index-global-v1-0-5km

Distribution Information

Distribution format	<ul style="list-style-type: none">• netCDF
Fees	Free
Ordering instructions	Products can be downloaded online via HTTP or can be received through EUMETCast satellite reception in Europe and Africa.
Units of distribution	Per product
OnLine resource	
OnLine resource	OGC WMTS
OnLine resource	Copernicus Data Space Ecosystem download services
Units of distribution	Per product
OnLine resource	Copernicus Browser

Data quality info

Hierarchy level	Dataset
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Report

Result

Title	Validation results conform CEOS LPV guidelines
Date (Publication)	2010-12-01
Explanation	https://land.copernicus.eu/en/products/temperature-and-reflectance/10-daily-land-surface-temperature-thermal-condition-index-global-v1-0-5km

Pass | 1

Report

Result

Title	COMMISSION REGULATION (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services
Date (Publication)	2010-12-08
Explanation	This data set is conformant with the INSPIRE Implementing Rules for the interoperability of spatial data sets and services
Pass	true

Report

Result

Title	Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services
Date (Publication)	2010-12-08
Explanation	See the referenced specification
Pass	1

Resource lineage

Statement	The objective of the LST product is to increase the area coverage of the LST product currently distributed by the Eumetsat Satellite Application Facility (SAF) on Land Surface Analysis (LSA). The LSA SAF generates, archives and disseminates LST from SEVIRI (onboard MSG) with a 15-minute frequency, at the original satellite spatial resolution. A near global product is obtained by merging SEVIRI- with GOES- and HIMAWARI-based LST produced with an hourly frequency. For more detailed information consult the Product User Manual.
Hierarchy level	Dataset

Spatial representation info

Number of dimensions	2
Dimension name	Row
Dimension size	3584
Resolution	0.04464
Dimension name	Column
Dimension size	8064
Resolution	0.04464
Cell geometry	Area
Transformation parameter availability	false
Check point availability	true
Check point description	Upperleft corner tiepoint
Description	Upperleft corner tiepoint

Identifier	upperLeftTiePoint
Name	Tie Point in upper left corner
Pixel orientation code	

Reference System Information

Reference System Information

Code	EPSG:32662
Maintenance and update frequency	As needed

Metadata

Metadata identifier	9143c7a3-5c81-4b0d-b5d1-8cfea8a73d84												
Language	English												
Character encoding	UTF8												
Contact	<table border="1"> <thead> <tr> <th>Organisation</th> <th>Individual</th> <th>Electronic mail address</th> <th>Website</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>Copernicus Land Monitoring Service</td> <td></td> <td>JRC-Copernicus-Land@ec.europa.eu</td> <td>https://land.copernicus.eu</td> <td>Point of contact</td> </tr> </tbody> </table>	Organisation	Individual	Electronic mail address	Website	Role	Copernicus Land Monitoring Service		JRC-Copernicus-Land@ec.europa.eu	https://land.copernicus.eu	Point of contact		
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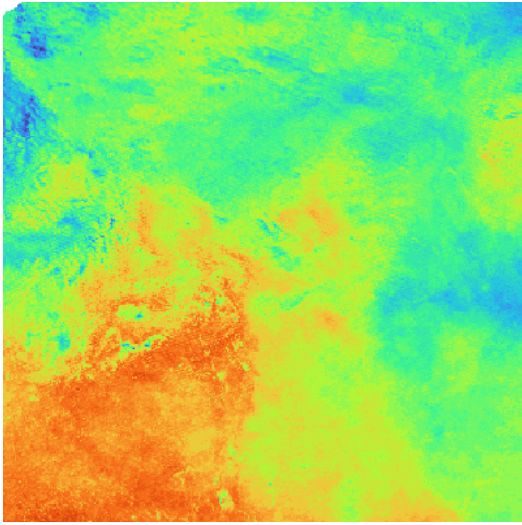
Type of resource

Resource type	Dataset
Metadata linkage	https://sdi.eea.europa.eu/catalogue/srv/api/records/9143c7a3-5c81-4b0d-b5d1-8cfea8a73d84
Date info (Creation)	2024-12-17T06:50:33.399794Z
Date info (Revision)	2025-10-09T11:03:29.501745Z

Metadata standard

Title	ISO 19115/19139
Edition	1.0

Overviews



Quicklook at full resolution.

Provided by

