Hourly Land Surface Temperature

Land Surface Temperature (LST) is the radiative skin temperature over land. LST plays an important role in the physics of land surface as it is involved in the processes of energy and water exchange with the atmosphere. LST 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.

Proposition de citation
. Hourly Land Surface Temperature. http://land.copernicus.vgt.vito.be/geonetwork/srv/api/records/urn:cgls:global:lst_v1_0.045degree

Simple

Date (Creation)
2018-01-04

Edition
V1

Edition date
2018-01-04

Identifier
urn:cgls:global:lst_v1_0.045degree

Date (Publication)
2018-01-04

Other citation details
https://land.copernicus.eu/global/documents/lst/v1/pum

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
LST products were generated by the 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. The algorithm was originally developed in the framework of the FP7/Geoland2. The LST product is the property of IPMA/Portugal under copyright Copernicus It is generated from the MTSAT, GOES and MSG data provided by Eumetsat.

Status
Completed

Principal investigator

Instituto Português do Mar e da Atmosfera
Rua C ao Aeroporto Lisbon 1749-077

Hours of service
Office hours, 5 days per week

Contact instructions
Preferrably by e-mail

Website
IPMA website

Organization website

Maintenance and update frequency
As needed

Update scope
Series

Name
NetCDF

Version
4

Specification
Network Common Data Form

GEMET - INSPIRE themes version 1.0

- Orthoimagery

GEMET - Concepts version 3.0

- solar radiation

Copernicus Themes (Theme)

- Energy

Copernicus Variables (Theme)

- Land Surface Temperature

Use limitation
no conditions apply

Use constraints
Copyright

Access constraints
Other restrictions

Other constraints
(d) the confidentiality of commercial or industrial information, where such confidentiality is provided for by national or Community law to protect a legitimate economic interest, including the public interest in maintaining statistical confidentiality and tax secrecy.

Association Type
Part of seamless database

Initiative Type
Project

Association Type
Source

Initiative Type
Platform

Association Type
Source

Initiative Type
Sensor

Association Type
Source

Initiative Type
Platform

Association Type
Source

Initiative Type
Sensor

Association Type
Source

Initiative Type
Platform

Association Type
Source

Initiative Type
Sensor

Spatial representation type
Grid

Distance
0.04464 http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/uom/ML_gmxUom.xml#deg

Metadata language
eng

Character set
UTF8

80.00 N
-80.00 S
180.00 E
-180.00 W

Time period
Instantaneous observationtimeslot2009-08-10T00:30:00Z2020-09-30T00:30:00Z

Supplemental Information
https://land.copernicus.eu/global/products/LST

Reference system identifier
EPSG Geodetic Parameter Dataset / EPSG:32662

Reference system identifier
World Geodetic System / WGS84

Number of dimensions
2

Dimension name
Row

Dimension size
3584

Resolution
0.04464 deg

Dimension name
Column

Dimension size
8064

Resolution
0.04464 deg

Cell geometry
Area

Transformation parameter availability
false

Checkpoint Availability
true

Checkpoint Description
Upperleft corner tiepoint

Point in Pixel

- Center

Distributor

Distributor

Instituto Português do Mar e da Atmosfera
IPMA Lisbon 1749-077

Hours of service
Office hours, 5 days per week

Contact instructions
Preferrably by e-mail

Website
IPMA website

Organization website

Fees
Free

Ordering instructions

Products can be downloaded on-line via HTTP (or FTP) or can be received through EUMETCast satellite reception in Africa and Latin-America. Through https://land.copernicus.eu/global/access, users can subscribe to receive future products as well as placing orders to retrieve the product archive (massive order). You will be informed through e-mail whenever new products are ready on the FTP server to be downloaded.

Units of distribution
Per product

OnLine resource
Copernicus Global Land Service

Download product

Units of distribution
Product bundles

OnLine resource
Copernicus Global Land Service

Request to receive products via FTP

Hierarchy level
Series

Conformance result

Date (Publication)
2010-12-01

Explanation
https://land.copernicus.eu/global/documents/lst/v1/vr

Pass
1

Conformance result

Date (Publication)
2010-12-08

Explanation
See the referenced specification

Pass
1

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.

gmd:MD_Metadata

File identifier
urn:cgls:global:lst_v1_0.045degree _XML

Metadata language
English

Character set
UTF8

Hierarchy level
Series

Date stamp
2020-03-06T16:48:00

Metadata standard name
ISO19115

Metadata standard version
2003/Cor.1:2006

Point of contact

Flemish Institute for Technological Research (VITO)
Boeretang 200 Mol 2400

Hours of service

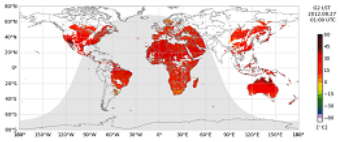
Office hours, 5 days per week

Contact instructions
Preferrably by e-mail

Website
Copernicus Global Land service

Copernicus Global Land service

Aperçus



Land Surface Temperature with diurnal cycle

Fourni par

Partager

Ressources associées

Not available