Mean Annual Sea Surface Temperature 2009-2013 (2015)

Low:
0°C

High:
26°C
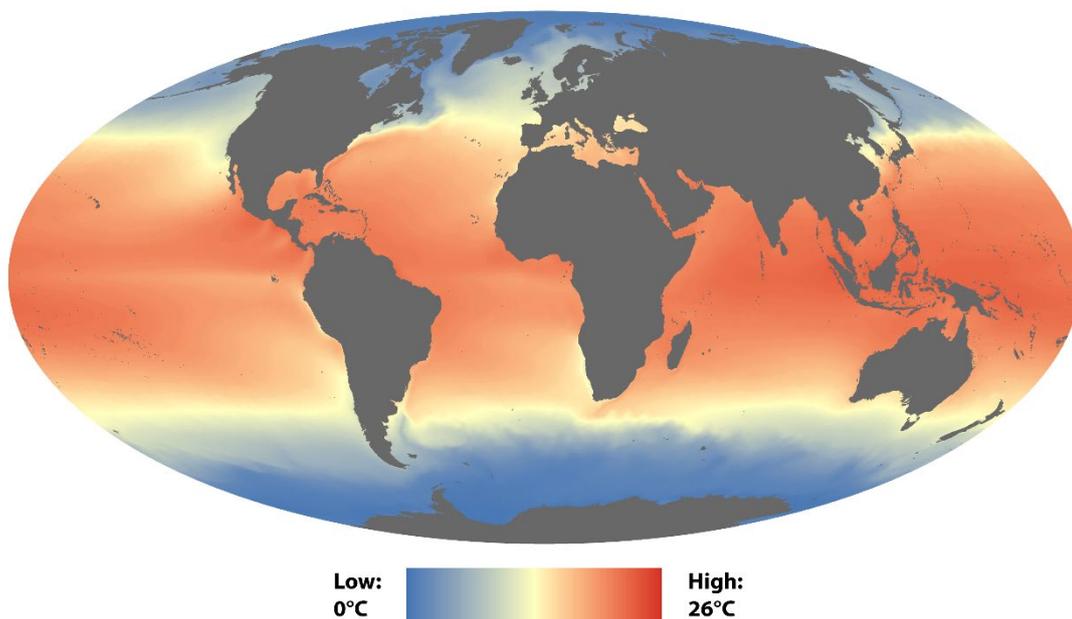
Description:	**This dataset shows the global distribution of mean annual sea surface temperature, averaged for the period from 2009 to 2013. It was created using remotely-sensed images from NASA's (National Aeronautics and Space Administration) Ocean Color database (http://oceancolor.gsfc.nasa.gov).**
Citation:	NASA Ocean Biology (OB.DAAC). (2014). Mean annual sea surface temperature for the period 2009-2013 (composite dataset created by UNEP-WCMC). Data obtained from the Moderate Resolution Imaging Spectroradiometer (MODIS) Aqua Ocean Colour website (NASA OB.DAAC, Greenbelt, MD, USA). Accessed 28/11/2014. URL: http://oceancolor.gsfc.nasa.gov/cgi/l3. Cambridge (UK): UN Environment Programme World Conservation Monitoring Centre. Data DOI: https://doi.org/10.34892/tf0n-6t02
Data collection date:	2009-2013
Geographic range:	Global
Supplementary information:	Sea surface temperature is given in degrees Celsius.
Purpose of creation:	Sea surface temperature is a climatic descriptor and it is controlled by other climatic variables such as air temperature, and ocean and wind currents. Sea surface temperature is a key factor affecting biodiversity patterns as the majority of organisms respond to the temperature of their immediate environment.
Creation methodology:	Information on the origins and calculations of the MODIS Aqua data can be accessed at Ocean Color Web (http://oceancolor.gsfc.nasa.gov/cms/data/aqua). UNEP-WCMC

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http://wcmc.io/MarineDataManual
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Ocean⁺

obtained Aqua MODIS daily sea surface temperature data in HDF format from the Ocean Color website (http://oceancolor.gsfc.nasa.gov/cgi/l3). The HDF data were converted to ArcGIS rasters using Marine Geospatial Ecology Tools (MGET), and units were converted into degrees Celsius using the raster calculator tool (ESRI ArcMap). The composite layer for years 2009 through 2013 was then created using the mosaic function in ArcMap, to calculate mean sea surface temperature across all layers.

Version:	1.0 (May 2015)
Lineage:	-
Category:	Environment descriptor
Keywords:	marine, coastal, high seas, sea surface temperature, SST
Similar datasets:	WCMC-022
Limitations:	This dataset is subject to algorithm uncertainties and assumptions. It is only representative of the period 2009 to 2013, and not of current sea surface temperature estimates or seasonal variations.
Maintenance frequency:	Data are not being updated.
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Organisation type:	Custodian
Contact Organisation:	UN Environment Programme World Conservation Monitoring Centre
City:	Cambridge, UK
E-mail:	oceanplus@unep-wcmc.org

Data format(s):	Raster (ESRI Grid); Layer package;	Dataset size (uncompressed):	107 MB
Webpage and/or download:	https://doi.org/10.34892/tf0n-6t02		
Web map service:	http://www.arcgis.com/home/item.html?id=864a1e24993c493aa9b70187bdded705		
Factsheet:	http://wcmc.io/environment-descriptors		
Resolution, scale:	0.08333 dd	Reference system:	WGS 1984
West bounding:	-180	East bounding:	180

Dataset ID: WCMC-035

South bounding:	-90	North bounding:	90
Metadata standard:	UNEP-WCMC Specific	Date of metadata:	26/03/2021