

## Pan-European Very High Resolution Image Mosaic 2018 - True Colour (2 m), Oct. 2021

The pan-European Very High Resolution (VHR) Image Mosaic 2018 is a seamless mosaic of the VHR 2018 dataset, based on watershed segmentation of image overlaps.

The input data consists of a mix of Pleiades, SPOT, DOVE, Kompsat-4, Deimos-2, SuperView, and TripleSat images. The input imagery has been colour balanced against the Sentinel-2 based HR mosaic from 2018. Colour balancing is done through iterative histogram matching, where the first iteration is used to identify clouds and snow, and the second iteration rebalances, with the bright objects masked out. Cloud cover has been minimized through an innovative approach to cloud masking, which relies on automatically identifying and de-prioritizing overly bright areas in the resulting mosaic. Some clouds and snow remain, as all pixels have to have a value, meaning that if no cloud or snow free images were available for a given area, the bright pixels will remain.

The mosaic primarily is used as input data in the production of various Copernicus Land Monitoring Service (CLMS) datasets and services, such as land cover maps and high resolution layers on land cover characteristic and can be also useful for CLMS users for visualizations and classifications on land.

The input imagery for the creation of the mosaic is provided by ESA. Due to license restrictions, VHR Image Mosaic 2018 is only available as a web service (WMS), and not for data download

#### **Simple**

Date (Creation)	2021-10-07T00:00:00				
Date (Publication)	2021-10-07T00:00:00				
Edition	01.00				
Citation identifier	copernicus_r_3035_2_m_vhrim-tc-2018_i_	.2017-2019_v01_r00			
Point of contact	Organisation name	Individual name	Electronic mail	Website	Role
	European Commission			https://commission.	Owner
	Copernicus Land Monitoring Service		copernicus@eea. europa.eu	https://land. copernicus.eu	Custodian
	European Environment Agency		sdi@eea.europa. eu	http://www.eea. europa.eu	Publisher
	Copernicus Land Monitoring Service helpdesk		copernicus@eea. europa.eu	https://land. copernicus.eu/en /contact-service- helpdesk	Point of contact
Maintenance and update frequency	As needed				
GEMET - INSPIRE themes, version 1.0	Orthoimagery				
Keywords					
Keywords					
GEMET	• general				
	environmental policy				
	mosaic				
	• raster				
	satellite image				
Continents, countries, sea regions of the world.	United Kingdom				

	• EEA38 (from 2020)
Spatial scope	European
Temporal resolution	As needed
	Land use
EEA topics	Other restrictions
Access constraints	no limitations to public access
Other constraints	Other restrictions
Use constraints 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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	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.
Spatial representation type	Grid
Distance	2 m
Language of dataset	English
Topic category	Environment     Imagery base maps earth cover

N S E W



Begin date	2017-05-01		
End date	2019-09-30		
Coordinate reference system identifier	EPSG:3035		
Distribution format	• GeoTIFF()		
OnLine resource	Protocol	Linkage	Name
	OGC:WMS	https://image.discomap.eea.europa.eu/arcgis/services /GioLand/VHR 2018 WM/ImageServer/WMSServer? request=GetCapabilities&service=WMS	
	WWW:LINK-1.0-httplink		Download (requires authentication)
OnLine resource	Protocol	Linkage	Name
	ESRI:REST	https://image.discomap.eea.europa.eu/arcgis/rest/services /GioLand/VHR 2018 WM/ImageServer	

#### OnLine resource

No information provided.

Hierarchy level	Dataset
Conformance 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
Statement	The input data consists of a mix of Pleiades, SPOT, DOVE, Kompsat-4, Deimos-2, SuperView, and TripleSat images.
	The processing steps were as follows:
	Resampling of all data to common resolution (2m)
	2. Pre-normalization of DOVE frames
	3. Merging of tiled datasets, such as DOVE frames and large SPOT images.
	4. Iterative colour balancing against the Sentinel-2 HR ARD mosaic, supported by water, snow, and cloud masking.
	5. Watershed segmentation on the morphological gradient to create seamlines.
	6. Cropping against seamlines and cloud-optimization for easy presentation.
	The list of steps outline above was implemented in custom Python code.
Metadata	
File identifier	455be6a0-d6cf-42c3-a28f-e024abc8227f XML

File identifier	455be6a0-d6cf-42c3-a28f-e024abc8227f XML				
Metadata language	English				
Character set	UTF8				
Hierarchy level	Dataset				
Date stamp	2024-09-20T08:27:39.740146Z				
Metadata standard name	ISO 19115/19139				
Metadata standard version	1.0				
Metadata author			Electronic		
	Organisation name	Individual name	mail address	Website Role	
	European Environment Agency		sdi@eea. europa.eu	Point of contact	

### Overviews



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