

EUNIS coastal habitat types, predicted distribution of habitat suitability - version 1, Nov. 2021

This metadata corresponds to the EUNIS Coastal habitat types, predicted distribution of habitat suitability dataset.

Coastal habitats are those above spring high tide limit (or above mean water level in non-tidal waters) occupying coastal features and characterised by their proximity to the sea, including coastal dunes and wooded coastal dunes, beaches and cliffs. Includes free-draining supralittoral habitats adjacent to marine habitats which are normally only very rarely subject to any type of salt water, in as much as they may be inhabited predominantly by terrestrial species, strandlines characterised by terrestrial invertebrates and moist and wet coastal dune slacks and dune-slack pools. Supralittoral sands and wracks may be found also in marine habitats (M). Excludes supralittoral rock pools and habitats, the splash zone immediately above the the mean water line, as well the spray zone and zone subject to sporadic inundation with salt water in as much as it may be inhabited predominantly by marine species, which are included in marine (M).

The modelled suitability for EUNIS coastal habitat types is an indication of where conditions are favourable for the habitat type based on sample plot data (Braun-Blanquet database) and the Maxent software package. The modelled suitability map may be used as a proxy for the geographical distribution of the habitat type. Note however that it is not representing the actual distribution of the habitat type. As predictors for the suitability modelling not only climate and soil parameters have been taken into account, but also so-called RS-EVB's, Remote Sensing-enabled Essential Biodiversity Variables, like land use, vegetation height, phenology, and LAI (Leaf Area Index). Because the EBV's are restricted by the extent of the remote sensing data (EEA38 countries and the United Kingdom) the modelling result does also not go beyond this boundary. The dataset is provided both in Geodatabase and Geopackage formats.

Simple

Date (Publication)	2021-11-15		
Date (Creation)	2019-03-01		
Edition	01.00		
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Point of contact	Organisation name	Individual name	Electronic mail address Website Role
	European Environment Agency		sdi@eea.europa.eu http://www.eea.europa.eu Point of contact
	European Environment Agency		sdi@eea.europa.eu Custodian

Point of contact

No information provided.

Point of contact

No information provided.

Maintenance and update frequency	Not planned
EEA topics	<ul style="list-style-type: none"> Biodiversity
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Habitats and biotopes
Keywords	
Keywords	
GEMET	<ul style="list-style-type: none"> terrestrial ecosystem coastal ecosystem natural area habitat

	<ul style="list-style-type: none"> • modelling
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> • United Kingdom • EEA38 (from 2020)
Spatial scope	<ul style="list-style-type: none"> • European
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 (https://www.eea.europa.eu/legal/copyright). Copyright holder: European Environment Agency (EEA).
Spatial representation type	Grid
Distance	1 1 km
Language of dataset	English
Topic category	<ul style="list-style-type: none"> • Biota

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Begin date	1940-01-01		
End date	2017-12-31		
Coordinate reference system identifier	EPSG:3035		
Distribution format	<ul style="list-style-type: none"> GDB (1) Geopackage () 		
OnLine resource	Protocol	Linkage	Name
	EEA:FOLDERPATH	https://sdi.eea.europa.eu/webdav/datastore/public/eea_r_3035_1_km_eunis-hab-n_p_1940-2017_v01_r00/	
	WWW:URL	https://sdi.eea.europa.eu/data/f97c9bdc-3bdc-45e9-8f28-e687702096d7	Direct download
	ESRI:REST	https://bio.discomap.eea.europa.eu/arcgis/rest/services/EUNIS/Mosaic_Coastal/ImageServer	Suitability Layer
	OGC:WMS	https://bio.discomap.eea.europa.eu/arcgis/services/EUNIS/Mosaic_Coastal/ImageServer/WMSServer?request=GetCapabilities&service=WMS	
	WWW:URL	https://sdi.eea.europa.eu/data/f5946d76-bf09-4261-8f2e-6218210ae3af	EUNIS documentation for habitat classification

OnLine resource

No information provided.

Hierarchy level	Dataset
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Conformance result

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

Statement	<p>The database compiled for the Braun-Blanquet project is a compilation of various national and regional vegetation databases. The maintenance of these databases is in principle in the hands of the custodians. However, before uploading the databases into Braun-Blanquet database a quality check is performed by Alterra and Masaryk University. If possible, detected errors are corrected and reported back to the data provider.</p> <p>For the modelling of the habitat suitability map the Maxent software is used (http://www.cs.princeton.edu/~schapire/maxent/). The grid values in the map represent the probability (ranging from 0-1) that the cell is suitable for the habitat.</p>
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The grid file represents the habitat suitability of the EUNIS type. For the modelling the widely used software Maxent for maximum entropy modelling of species' geographic distributions was used. Maxent is a general-purpose machine-learning method with a simple and precise mathematical formulation, and has a number of aspects that make it well-suited for species distribution modelling when only presence (occurrence) data but not absence data are available (Phillips et al. 2006). Because EUNIS habitats have a particular species composition, they are assumed to respond to specific ecological requirements, allowing us to generate correlative estimates of geographic distributions. Modelling habitats that have been floristically defined is a well-known procedure for ecological modelling at local scales, and a promising technique to be applied also at the continental level.

The Maxent method considers presence data (known observations of a given entity) and the so-called background data. Background data comprise a set of points used to describe the environmental variation of the study area according to the available environmental layers. It is assumed that these layers represent well the most important ecological gradients on a European scale. As layers the following environmental parameters have been used: Potential Evapotranspiration, Topsoil pH, Solar radiation, Temperature Seasonality (standard deviation *100), Mean Temperature of Wettest Quarter, Annual Precipitation, Precipitation Seasonality (Coefficient of Variation), Precipitation of Warmest Quarter & Distance to water (rivers, lakes, sea) and the RS-EBV's (Remote Sensing-enabled Essential Biodiversity Variables) Inundation; occurrence, Phenology; End of Season (day number), Phenology; Length of season (days), Phenology; Low of season (day number), Phenology; NDVI mean, Phenology; NDVI seasonality, Phenology; Peak of season (day number), Phenology; Start of Season (day number), Vegetation height (m). For more information on the RS-EBV's see the document "Description of European RS-EBV's and abiotic site conditions" provided with the dataset.

Supporting information on the creation of this dataset is available in the ETC/BD Technical paper 3/2019: 'Distribution and habitat suitability maps of revised EUNIS coastal and wetland habitats' at: <https://www.eionet.europa.eu/etcs/etc-bd/products/etc-bd-reports/etc-bd-technical-paper-3-2019-distribution-and-habitat-suitability-maps-of-revised-eunis-coastal-and-wetland-habitats> .

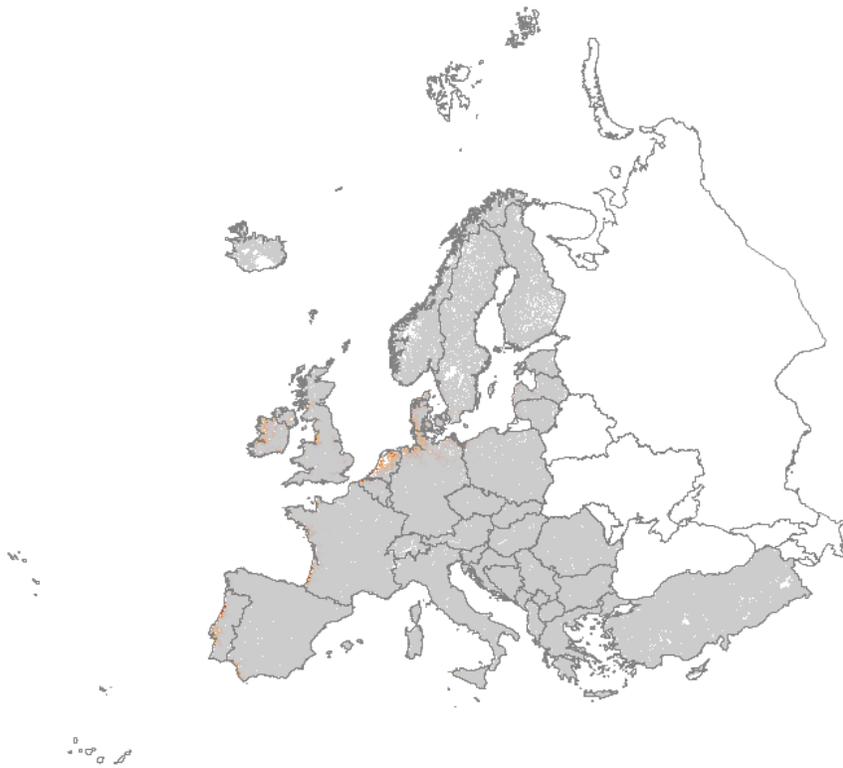
Source

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Metadata

File identifier	f97c9bdc-3bdc-45e9-8f28-e687702096d7 XML		
Metadata language	English		
Character set	UTF8		
Hierarchy level	Dataset		
Date stamp	2024-05-22T14:09:15.772611Z		
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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