

EUNIS habitat type F7.4a, predicted habitat suitability - version 1, June 2016

The modelled suitability for the EUNIS habitat type 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.

Also note that predictions are less reliable due to data deficiency in the eastern part of Europe, and to a lesser extent to the Scandinavian countries.

Geographic restriction for plot observations: n/a

Remarks: Prediction in Germany should be ignored.

Simple

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Point of contact	Organisation name	Individual name	Electronic mail address	Website Role
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	European Environment Agency		sdi@eea.europa.eu	Custodian

Point of contact

No information provided.

Maintenance and update frequency	Unknown
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Habitats and biotopes
GEMET	<ul style="list-style-type: none"> natural area tundra terrestrial ecosystem heathland
Keywords	
Keywords	
Place	<ul style="list-style-type: none"> Europe
EEA topics	<ul style="list-style-type: none"> Biodiversity
Use limitation	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 (http://www.eea.europa.eu/legal/copyright). Copyright holder: European Environment Agency (EEA).

Access constraints	Other restrictions
Other constraints	no limitations to public access
Spatial representation type	Grid
Distance	1 1 km
Language of dataset	English
Character set	UTF8
Topic category	<ul style="list-style-type: none">• Biota

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Begin date	1940-01-01		
End date	2011-12-31		
Coordinate reference system identifier	EPSG:3035		
Distribution format	• GeoTIFF ()		
OnLine resource	Protocol	Linkage	Name
	EEA:FILEPATH	https://sdi.eea.europa.eu/webdav/datastore/public/eea_r_3035_1_km_eunis-hab-f7-4a_p_1940-2011_v01_r00/F7-4a_ed1.tif	
	WWW:URL	https://sdi.eea.europa.eu/data/1642e81f-3442-49fc-bbbd-fe55669086c4	Direct download
Hierarchy level	Dataset		

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. 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> <p>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.</p> <p>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).</p> <p>Statistical output of the model:</p> <p>#Training samples: 198</p> <p>Regularized training gain: 2.6988</p>
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Unregularized training gain: 2.8457
Iterations: 500
Training AUC: 0.978
#Test samples: 22
Test gain: 2.6462
Test AUC: 0.9749
AUC Standard Deviation: 0.0045
#Background points: 5198
bio_12_etr2_ras contribution: 0.0604
bio_15_etr2_ras contribution: 0.4649
bio_18_etr2_ras contribution: 1.9568
bio_4_etr2_ras contribution: 44.1131
bio_8_etr2_ras contribution: 0.1845
bld_m_sd1_1km_eu_ll contribution: 4.8498
cecsum_m_sd1_1km_eu_ll contribution: 0.0109
clyppt_m_sd1_1km_eu_ll contribution: 1.069
crvol_m_sd1_1km_eu_ll contribution: 11.4203
dist2water1km contribution: 0.1268
orcdrc_m_sd1_1km_eu_ll contribution: 0.0364
pet_he_yr contribution: 4.481
phihox_m_sd1_1km_eu_ll contribution: 0.4291
sltppt_m_sd1_1km_eu_ll contribution: 0.17
sndppt_m_sd1_1km_eu_ll contribution: 6.6428
solar_1km contribution: 23.9843
bio_12_etr2_ras permutation importance: 0.3837
bio_15_etr2_ras permutation importance: 2.1069
bio_18_etr2_ras permutation importance: 2.1893
bio_4_etr2_ras permutation importance: 49.2294
bio_8_etr2_ras permutation importance: 0.8161
bld_m_sd1_1km_eu_ll permutation importance: 2.4472
cecsum_m_sd1_1km_eu_ll permutation importance: 0
clyppt_m_sd1_1km_eu_ll permutation importance: 1.1121
crvol_m_sd1_1km_eu_ll permutation importance: 21.7736
dist2water1km permutation importance: 0.018
orcdrc_m_sd1_1km_eu_ll permutation importance: 0.2431
pet_he_yr permutation importance: 3.8617
phihox_m_sd1_1km_eu_ll permutation importance: 0.2125
sltppt_m_sd1_1km_eu_ll permutation importance: 0.0645
sndppt_m_sd1_1km_eu_ll permutation importance: 12.861
solar_1km permutation importance: 2.6809
Entropy: 5.8591
Prevalence (average of logistic output over background sites): 0.0319
Fixed cumulative value 1 cumulative threshold: 1

Fixed cumulative value 1 logistic threshold: 0.0101
Fixed cumulative value 1 area: 0.1604
Fixed cumulative value 1 training omission: 0
Fixed cumulative value 1 test omission: 0
Fixed cumulative value 1 binomial probability: 3.29E-18
Fixed cumulative value 5 cumulative threshold: 5
Fixed cumulative value 5 logistic threshold: 0.0804
Fixed cumulative value 5 area: 0.0702
Fixed cumulative value 5 training omission: 0.0051
Fixed cumulative value 5 test omission: 0.0455
Fixed cumulative value 5 binomial probability: 1.22E-23
Fixed cumulative value 10 cumulative threshold: 10
Fixed cumulative value 10 logistic threshold: 0.2421
Fixed cumulative value 10 area: 0.0506
Fixed cumulative value 10 training omission: 0.0404
Fixed cumulative value 10 test omission: 0.1364
Fixed cumulative value 10 binomial probability: 3.17E-22
Minimum training presence cumulative threshold: 4.5647
Minimum training presence logistic threshold: 0.0675
Minimum training presence area: 0.0739
Minimum training presence training omission: 0
Minimum training presence test omission: 0.0455
Minimum training presence binomial probability: 3.54E-23
10 percentile training presence cumulative threshold: 14.9112
10 percentile training presence logistic threshold: 0.3598
10 percentile training presence area: 0.0425
10 percentile training presence training omission: 0.096
10 percentile training presence test omission: 0.2273
10 percentile training presence binomial probability: 1.04E-19
Equal training sensitivity and specificity cumulative threshold: 11.0927
Equal training sensitivity and specificity logistic threshold: 0.2639
Equal training sensitivity and specificity area: 0.0485
Equal training sensitivity and specificity training omission: 0.0505
Equal training sensitivity and specificity test omission: 0.1364
Equal training sensitivity and specificity binomial probability: 1.42E-22
Maximum training sensitivity plus specificity cumulative threshold: 6.1491
Maximum training sensitivity plus specificity logistic threshold: 0.1169
Maximum training sensitivity plus specificity area: 0.0629
Maximum training sensitivity plus specificity training omission: 0.0051
Maximum training sensitivity plus specificity test omission: 0.0909
Maximum training sensitivity plus specificity binomial probability: 1.92E-22
Equal test sensitivity and specificity cumulative threshold: 6.0538

Equal test sensitivity and specificity logistic threshold: 0.1149

Equal test sensitivity and specificity area: 0.0635

Equal test sensitivity and specificity training omission: 0.0051

Equal test sensitivity and specificity test omission: 0.0455

Equal test sensitivity and specificity binomial probability: 1.48E-24

Maximum test sensitivity plus specificity cumulative threshold: 4.316

Maximum test sensitivity plus specificity logistic threshold: 0.0632

Maximum test sensitivity plus specificity area: 0.0762

Maximum test sensitivity plus specificity training omission: 0

Maximum test sensitivity plus specificity test omission: 0

Maximum test sensitivity plus specificity binomial probability: 2.52E-25

Balance training omission, predicted area and threshold value cumulative threshold: 2.3501

Balance training omission, predicted area and threshold value logistic threshold: 0.0262

Balance training omission, predicted area and threshold value area: 0.1077

Balance training omission, predicted area and threshold value training omission: 0

Balance training omission, predicted area and threshold value test omission: 0

Balance training omission, predicted area and threshold value binomial probability: 5.15E-22

Equate entropy of thresholded and original distributions cumulative threshold: 5.4059

Equate entropy of thresholded and original distributions logistic threshold: 0.0902

Equate entropy of thresholded and original distributions area: 0.0673

Equate entropy of thresholded and original distributions training omission: 0.0051

Equate entropy of thresholded and original distributions test omission: 0.0455

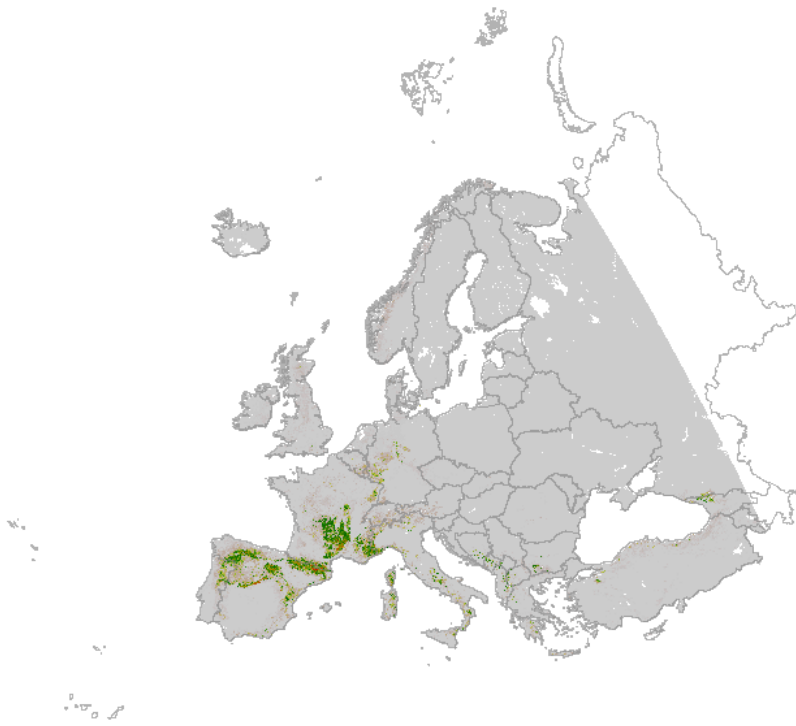
Equate entropy of thresholded and original distributions binomial probability: 5.09E-24

Source	•
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Metadata

File identifier	1642e81f-3442-49fc-bbbd-fe55669086c4 XML		
Metadata language	English		
Character set	UTF8		
Hierarchy level	Dataset		
Date stamp	2022-01-31T13:44:38.142Z		
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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