

EUNIS habitat type F5.3, 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: Bad model, because of prediction in Ireland, England, and Hungary. The reason for for this is that this habitat type has a poor relation to climatic factors.

Prediction in eastern part of Europe (Türkiye) uncertain due to lack of data for that area.

Simple

Date (Publication)	2016-07-01																	
Date (Creation)	2016-07-06																	
Edition	01																	
Citation identifier	eea_r_3035_1_km_eunis-hab-f5-3_p_1940-2011_v01_r00																	
Status	Obsolete																	
Point of contact	<table border="1"> <thead> <tr> <th>Organisation name</th> <th>Individual name</th> <th>Electronic mail address</th> <th>Website</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>European Environment Agency</td> <td></td> <td>sdi@eea.europa.eu</td> <td>http://www.eea.europa.eu</td> <td>Point of contact</td> </tr> <tr> <td>European Environment Agency</td> <td></td> <td>sdi@eea.europa.eu</td> <td></td> <td>Custodian</td> </tr> </tbody> </table>	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		
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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	

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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-f5-3_p_1940-2011_v01_r00/F5-3_ed1.tif	
	WWW:URL	https://sdi.eea.europa.eu/data/bb3c6b8c-0b04-45e3-8951-30bf0baa79cb	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: 14</p> <p>Regularized training gain: 1.9868</p>
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Unregularized training gain: 2.5895
Iterations: 280
Training AUC: 0.9786
#Test samples: 1
Test gain: 1.8976
Test AUC: 0.9577
AUC Standard Deviation: -1
#Background points: 5014
bio_12_etr2_ras contribution: 0.7049
bio_15_etr2_ras contribution: 13.3498
bio_18_etr2_ras contribution: 5.0467
bio_4_etr2_ras contribution: 27.2165
bio_8_etr2_ras contribution: 0
bld_m_sd1_1km_eu_ll contribution: 0
cecum_m_sd1_1km_eu_ll contribution: 0.3314
clyppt_m_sd1_1km_eu_ll contribution: 2.2254
crvol_m_sd1_1km_eu_ll contribution: 10.1288
dist2water1km contribution: 0
orcdrc_m_sd1_1km_eu_ll contribution: 0
pet_he_yr contribution: 6.334
phihox_m_sd1_1km_eu_ll contribution: 11.8113
sltppt_m_sd1_1km_eu_ll contribution: 8.4849
sndppt_m_sd1_1km_eu_ll contribution: 11.1609
solar_1km contribution: 3.2053
bio_12_etr2_ras permutation importance: 1.046
bio_15_etr2_ras permutation importance: 29.1972
bio_18_etr2_ras permutation importance: 8.6671
bio_4_etr2_ras permutation importance: 4.9213
bio_8_etr2_ras permutation importance: 0
bld_m_sd1_1km_eu_ll permutation importance: 0
cecum_m_sd1_1km_eu_ll permutation importance: 0.4246
clyppt_m_sd1_1km_eu_ll permutation importance: 0
crvol_m_sd1_1km_eu_ll permutation importance: 4.0363
dist2water1km permutation importance: 0
orcdrc_m_sd1_1km_eu_ll permutation importance: 0
pet_he_yr permutation importance: 10.8126
phihox_m_sd1_1km_eu_ll permutation importance: 0
sltppt_m_sd1_1km_eu_ll permutation importance: 11.2417
sndppt_m_sd1_1km_eu_ll permutation importance: 28.777
solar_1km permutation importance: 0.8761
Entropy: 6.5331
Prevalence (average of logistic output over background sites): 0.0659
Fixed cumulative value 1 cumulative threshold: 1

Fixed cumulative value 1 logistic threshold: 0.0135
Fixed cumulative value 1 area: 0.3408
Fixed cumulative value 1 training omission: 0
Fixed cumulative value 1 test omission: 0
Fixed cumulative value 1 binomial probability: 3.41E-01
Fixed cumulative value 5 cumulative threshold: 5
Fixed cumulative value 5 logistic threshold: 0.0734
Fixed cumulative value 5 area: 0.1911
Fixed cumulative value 5 training omission: 0
Fixed cumulative value 5 test omission: 0
Fixed cumulative value 5 binomial probability: 1.91E-01
Fixed cumulative value 10 cumulative threshold: 10
Fixed cumulative value 10 logistic threshold: 0.1523
Fixed cumulative value 10 area: 0.1344
Fixed cumulative value 10 training omission: 0
Fixed cumulative value 10 test omission: 0
Fixed cumulative value 10 binomial probability: 1.34E-01
Minimum training presence cumulative threshold: 34.1041
Minimum training presence logistic threshold: 0.4307
Minimum training presence area: 0.0503
Minimum training presence training omission: 0
Minimum training presence test omission: 0
Minimum training presence binomial probability: 5.03E-02
10 percentile training presence cumulative threshold: 41.8924
10 percentile training presence logistic threshold: 0.5098
10 percentile training presence area: 0.0383
10 percentile training presence training omission: 0.0714
10 percentile training presence test omission: 1
10 percentile training presence binomial probability: 1.00E+00
Equal training sensitivity and specificity cumulative threshold: 34.2142
Equal training sensitivity and specificity logistic threshold: 0.4307
Equal training sensitivity and specificity area: 0.0503
Equal training sensitivity and specificity training omission: 0.0714
Equal training sensitivity and specificity test omission: 0
Equal training sensitivity and specificity binomial probability: 5.03E-02
Maximum training sensitivity plus specificity cumulative threshold: 34.1041
Maximum training sensitivity plus specificity logistic threshold: 0.4307
Maximum training sensitivity plus specificity area: 0.0503
Maximum training sensitivity plus specificity training omission: 0
Maximum training sensitivity plus specificity test omission: 0
Maximum training sensitivity plus specificity binomial probability: 5.03E-02
Equal test sensitivity and specificity cumulative threshold: 39.0248

Equal test sensitivity and specificity logistic threshold: 0.4777

Equal test sensitivity and specificity area: 0.0423

Equal test sensitivity and specificity training omission: 0.0714

Equal test sensitivity and specificity test omission: 0

Equal test sensitivity and specificity binomial probability: 4.23E-02

Maximum test sensitivity plus specificity cumulative threshold: 39.0248

Maximum test sensitivity plus specificity logistic threshold: 0.4777

Maximum test sensitivity plus specificity area: 0.0423

Maximum test sensitivity plus specificity training omission: 0.0714

Maximum test sensitivity plus specificity test omission: 0

Maximum test sensitivity plus specificity binomial probability: 4.23E-02

Balance training omission, predicted area and threshold value cumulative threshold: 3.562

Balance training omission, predicted area and threshold value logistic threshold: 0.0519

Balance training omission, predicted area and threshold value area: 0.221

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: 2.21E-01

Equate entropy of thresholded and original distributions cumulative threshold: 9.6718

Equate entropy of thresholded and original distributions logistic threshold: 0.1474

Equate entropy of thresholded and original distributions area: 0.137

Equate entropy of thresholded and original distributions training omission: 0

Equate entropy of thresholded and original distributions test omission: 0

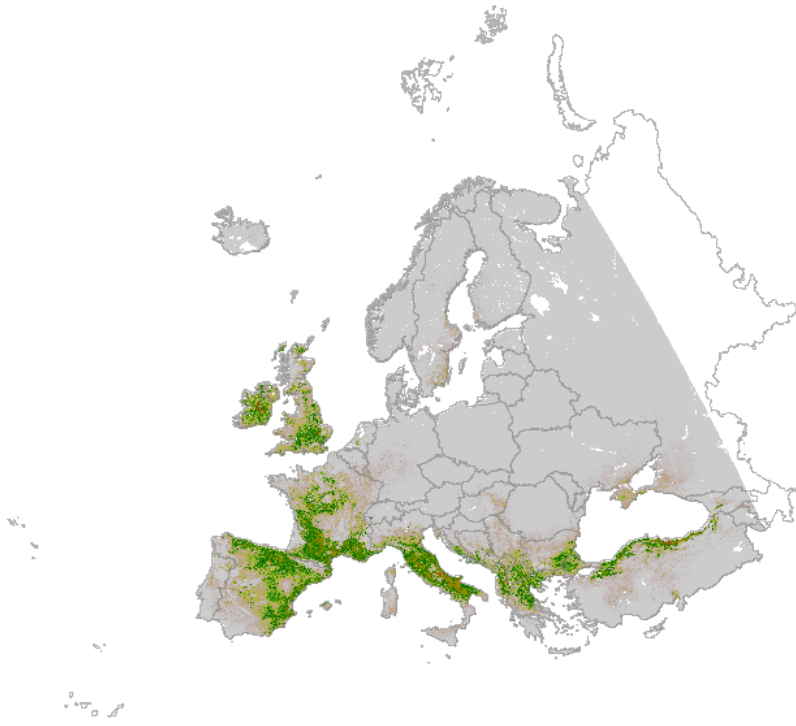
Equate entropy of thresholded and original distributions binomial probability: 1.37E-01

Source	•
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Metadata

File identifier	bb3c6b8c-0b04-45e3-8951-30bf0baa79cb XML		
Metadata language	English		
Character set	UTF8		
Hierarchy level	Dataset		
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Metadata standard name	ISO 19115/19139		
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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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