

EUNIS habitat type F9.1a, 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 eastern part of Europe (Caucasus) uncertain due to lack of data for that area.

Simple

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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.

Maintenance and update frequency	Unknown
EEA topics	<ul style="list-style-type: none"> Biodiversity
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
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-f9-1a_p_1940-2011_v01_r00/F9-1a_ed1.tif	
	WWW:URL	https://sdi.eea.europa.eu/data/c0849cb5-3199-440f-a6f2-81d06b9d6f24	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: 28</p> <p>Regularized training gain: 2.6513</p>
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Unregularized training gain: 3.2365
Iterations: 500
Training AUC: 0.9784
#Test samples: 3
Test gain: 1.7485
Test AUC: 0.9554
AUC Standard Deviation: 0.0168
#Background points: 5028
bio_12_etr2_ras contribution: 2.062
bio_15_etr2_ras contribution: 2.7475
bio_18_etr2_ras contribution: 5.4374
bio_4_etr2_ras contribution: 15.7363
bio_8_etr2_ras contribution: 13.3716
bld_m_sd1_1km_eu_ll contribution: 3.9422
cecum_m_sd1_1km_eu_ll contribution: 3.8722
clyppt_m_sd1_1km_eu_ll contribution: 4.7988
crvol_m_sd1_1km_eu_ll contribution: 0.0194
dist2water1km contribution: 0.0549
orcdrc_m_sd1_1km_eu_ll contribution: 6.8494
pet_he_yr contribution: 39.4572
phihox_m_sd1_1km_eu_ll contribution: 0.0006
sltppt_m_sd1_1km_eu_ll contribution: 0
sndppt_m_sd1_1km_eu_ll contribution: 0
solar_1km contribution: 1.6505
bio_12_etr2_ras permutation importance: 2.6305
bio_15_etr2_ras permutation importance: 2.3392
bio_18_etr2_ras permutation importance: 9.287
bio_4_etr2_ras permutation importance: 7.7913
bio_8_etr2_ras permutation importance: 28.9472
bld_m_sd1_1km_eu_ll permutation importance: 22.3513
cecum_m_sd1_1km_eu_ll permutation importance: 12.7336
clyppt_m_sd1_1km_eu_ll permutation importance: 0.8768
crvol_m_sd1_1km_eu_ll permutation importance: 0.1092
dist2water1km permutation importance: 0.0152
orcdrc_m_sd1_1km_eu_ll permutation importance: 1.6717
pet_he_yr permutation importance: 8.5437
phihox_m_sd1_1km_eu_ll permutation importance: 0.0273
sltppt_m_sd1_1km_eu_ll permutation importance: 0
sndppt_m_sd1_1km_eu_ll permutation importance: 0
solar_1km permutation importance: 2.676
Entropy: 5.8744
Prevalence (average of logistic output over background sites): 0.0339
Fixed cumulative value 1 cumulative threshold: 1

Fixed cumulative value 1 logistic threshold: 0.007
Fixed cumulative value 1 area: 0.3117
Fixed cumulative value 1 training omission: 0
Fixed cumulative value 1 test omission: 0
Fixed cumulative value 1 binomial probability: 3.03E-02
Fixed cumulative value 5 cumulative threshold: 5
Fixed cumulative value 5 logistic threshold: 0.0396
Fixed cumulative value 5 area: 0.1553
Fixed cumulative value 5 training omission: 0.0357
Fixed cumulative value 5 test omission: 0
Fixed cumulative value 5 binomial probability: 3.75E-03
Fixed cumulative value 10 cumulative threshold: 10
Fixed cumulative value 10 logistic threshold: 0.0871
Fixed cumulative value 10 area: 0.1002
Fixed cumulative value 10 training omission: 0.0714
Fixed cumulative value 10 test omission: 0
Fixed cumulative value 10 binomial probability: 1.01E-03
Minimum training presence cumulative threshold: 4.0019
Minimum training presence logistic threshold: 0.0304
Minimum training presence area: 0.1748
Minimum training presence training omission: 0
Minimum training presence test omission: 0
Minimum training presence binomial probability: 5.34E-03
10 percentile training presence cumulative threshold: 17.2303
10 percentile training presence logistic threshold: 0.1588
10 percentile training presence area: 0.0623
10 percentile training presence training omission: 0.0714
10 percentile training presence test omission: 0.3333
10 percentile training presence binomial probability: 1.11E-02
Equal training sensitivity and specificity cumulative threshold: 15.0028
Equal training sensitivity and specificity logistic threshold: 0.1363
Equal training sensitivity and specificity area: 0.0714
Equal training sensitivity and specificity training omission: 0.0714
Equal training sensitivity and specificity test omission: 0.3333
Equal training sensitivity and specificity binomial probability: 1.46E-02
Maximum training sensitivity plus specificity cumulative threshold: 17.2303
Maximum training sensitivity plus specificity logistic threshold: 0.1588
Maximum training sensitivity plus specificity area: 0.0623
Maximum training sensitivity plus specificity training omission: 0.0714
Maximum training sensitivity plus specificity test omission: 0.3333
Maximum training sensitivity plus specificity binomial probability: 1.11E-02
Equal test sensitivity and specificity cumulative threshold: 13.7596

Equal test sensitivity and specificity logistic threshold: 0.1225

Equal test sensitivity and specificity area: 0.0772

Equal test sensitivity and specificity training omission: 0.0714

Equal test sensitivity and specificity test omission: 0

Equal test sensitivity and specificity binomial probability: 4.59E-04

Maximum test sensitivity plus specificity cumulative threshold: 13.7596

Maximum test sensitivity plus specificity logistic threshold: 0.1225

Maximum test sensitivity plus specificity area: 0.0772

Maximum test sensitivity plus specificity training omission: 0.0714

Maximum test sensitivity plus specificity test omission: 0

Maximum test sensitivity plus specificity binomial probability: 4.59E-04

Balance training omission, predicted area and threshold value cumulative threshold: 3.5898

Balance training omission, predicted area and threshold value logistic threshold: 0.0275

Balance training omission, predicted area and threshold value area: 0.1848

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: 6.31E-03

Equate entropy of thresholded and original distributions cumulative threshold: 15.1812

Equate entropy of thresholded and original distributions logistic threshold: 0.1374

Equate entropy of thresholded and original distributions area: 0.0706

Equate entropy of thresholded and original distributions training omission: 0.0714

Equate entropy of thresholded and original distributions test omission: 0.3333

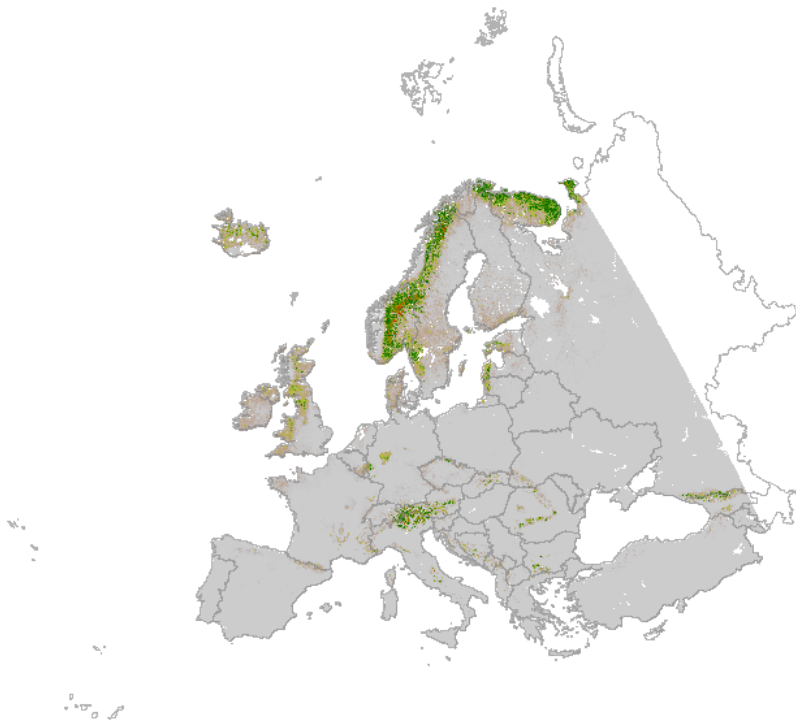
Equate entropy of thresholded and original distributions binomial probability: 1.43E-02

Source	•
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Metadata

File identifier	c0849cb5-3199-440f-a6f2-81d06b9d6f24 XML								
Metadata language	English								
Character set	UTF8								
Hierarchy level	Dataset								
Date stamp	2022-01-31T13:39:00.646Z								
Metadata standard name	ISO 19115/19139								
Metadata standard version	1.0								
Metadata author	<table border="0"> <thead> <tr> <th>Organisation name</th> <th>Individual name</th> <th>Electronic mail address</th> <th>Website Role</th> </tr> </thead> <tbody> <tr> <td>European Environment Agency</td> <td></td> <td>sdi@eea.europa.eu</td> <td>Point of contact</td> </tr> </tbody> </table>	Organisation name	Individual name	Electronic mail address	Website Role	European Environment Agency		sdi@eea.europa.eu	Point of contact
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Overviews



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