

EUNIS habitat type F5.4, 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: Poor prediction for Spain due to lack of data. *Spartium junceum* actually occurs throughout Spain.

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-f5-4_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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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-f5-4_p_1940-2011_v01_r00/F5-4_ed1.tif	
	WWW:URL	https://sdi.eea.europa.eu/data/68ade09a-e970-4ad1-90cb-f2353a087ae1	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: 65</p> <p>Regularized training gain: 2.9405</p>
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Unregularized training gain: 3.2711

Iterations: 500

Training AUC: 0.9873

#Test samples: 7

Test gain: 3.0121

Test AUC: 0.9804

AUC Standard Deviation: 0.0109

#Background points: 5065

bio_12_etr2_ras contribution: 18.9034

bio_15_etr2_ras contribution: 3.7847

bio_18_etr2_ras contribution: 2.6968

bio_4_etr2_ras contribution: 22.7849

bio_8_etr2_ras contribution: 6.4925

bld_m_sd1_1km_eu_ll contribution: 1.4665

cecum_m_sd1_1km_eu_ll contribution: 0.0768

clyppt_m_sd1_1km_eu_ll contribution: 26.3259

crvol_m_sd1_1km_eu_ll contribution: 0.7765

dist2water1km contribution: 0.0908

orcdrc_m_sd1_1km_eu_ll contribution: 0.1728

pet_he_yr contribution: 0.0964

phihox_m_sd1_1km_eu_ll contribution: 13.4566

sltppt_m_sd1_1km_eu_ll contribution: 2.8043

sndppt_m_sd1_1km_eu_ll contribution: 0.0555

solar_1km contribution: 0.0156

bio_12_etr2_ras permutation importance: 20.5001

bio_15_etr2_ras permutation importance: 1.5151

bio_18_etr2_ras permutation importance: 1.2774

bio_4_etr2_ras permutation importance: 15.5413

bio_8_etr2_ras permutation importance: 8.992

bld_m_sd1_1km_eu_ll permutation importance: 1.3218

cecum_m_sd1_1km_eu_ll permutation importance: 0.8194

clyppt_m_sd1_1km_eu_ll permutation importance: 17.5782

crvol_m_sd1_1km_eu_ll permutation importance: 0.5392

dist2water1km permutation importance: 0.2821

orcdrc_m_sd1_1km_eu_ll permutation importance: 0.8542

pet_he_yr permutation importance: 1.4146

phihox_m_sd1_1km_eu_ll permutation importance: 17.5221

sltppt_m_sd1_1km_eu_ll permutation importance: 9.9235

sndppt_m_sd1_1km_eu_ll permutation importance: 1.8842

solar_1km permutation importance: 0.0348

Entropy: 5.5959

Prevalence (average of logistic output over background sites): 0.0248

Fixed cumulative value 1 cumulative threshold: 1

Fixed cumulative value 1 logistic threshold: 0.0065
Fixed cumulative value 1 area: 0.2047
Fixed cumulative value 1 training omission: 0
Fixed cumulative value 1 test omission: 0
Fixed cumulative value 1 binomial probability: 1.51E-05
Fixed cumulative value 5 cumulative threshold: 5
Fixed cumulative value 5 logistic threshold: 0.0403
Fixed cumulative value 5 area: 0.0847
Fixed cumulative value 5 training omission: 0
Fixed cumulative value 5 test omission: 0.1429
Fixed cumulative value 5 binomial probability: 2.40E-06
Fixed cumulative value 10 cumulative threshold: 10
Fixed cumulative value 10 logistic threshold: 0.128
Fixed cumulative value 10 area: 0.0501
Fixed cumulative value 10 training omission: 0.0154
Fixed cumulative value 10 test omission: 0.1429
Fixed cumulative value 10 binomial probability: 1.06E-07
Minimum training presence cumulative threshold: 6.9779
Minimum training presence logistic threshold: 0.0684
Minimum training presence area: 0.0661
Minimum training presence training omission: 0
Minimum training presence test omission: 0.1429
Minimum training presence binomial probability: 5.53E-07
10 percentile training presence cumulative threshold: 19.326
10 percentile training presence logistic threshold: 0.2902
10 percentile training presence area: 0.0296
10 percentile training presence training omission: 0.0923
10 percentile training presence test omission: 0.1429
10 percentile training presence binomial probability: 4.60E-09
Equal training sensitivity and specificity cumulative threshold: 15.779
Equal training sensitivity and specificity logistic threshold: 0.2199
Equal training sensitivity and specificity area: 0.0351
Equal training sensitivity and specificity training omission: 0.0308
Equal training sensitivity and specificity test omission: 0.1429
Equal training sensitivity and specificity binomial probability: 1.28E-08
Maximum training sensitivity plus specificity cumulative threshold: 15.4687
Maximum training sensitivity plus specificity logistic threshold: 0.2166
Maximum training sensitivity plus specificity area: 0.0357
Maximum training sensitivity plus specificity training omission: 0.0154
Maximum training sensitivity plus specificity test omission: 0.1429
Maximum training sensitivity plus specificity binomial probability: 1.41E-08
Equal test sensitivity and specificity cumulative threshold: 4.7332

Equal test sensitivity and specificity logistic threshold: 0.038

Equal test sensitivity and specificity area: 0.0883

Equal test sensitivity and specificity training omission: 0

Equal test sensitivity and specificity test omission: 0.1429

Equal test sensitivity and specificity binomial probability: 3.06E-06

Maximum test sensitivity plus specificity cumulative threshold: 4.7311

Maximum test sensitivity plus specificity logistic threshold: 0.0379

Maximum test sensitivity plus specificity area: 0.0883

Maximum test sensitivity plus specificity training omission: 0

Maximum test sensitivity plus specificity test omission: 0

Maximum test sensitivity plus specificity binomial probability: 4.17E-08

Balance training omission, predicted area and threshold value cumulative threshold: 2.8276

Balance training omission, predicted area and threshold value logistic threshold: 0.0207

Balance training omission, predicted area and threshold value area: 0.1232

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: 4.31E-07

Equate entropy of thresholded and original distributions cumulative threshold: 9.29

Equate entropy of thresholded and original distributions logistic threshold: 0.1101

Equate entropy of thresholded and original distributions area: 0.0531

Equate entropy of thresholded and original distributions training omission: 0.0154

Equate entropy of thresholded and original distributions test omission: 0.1429

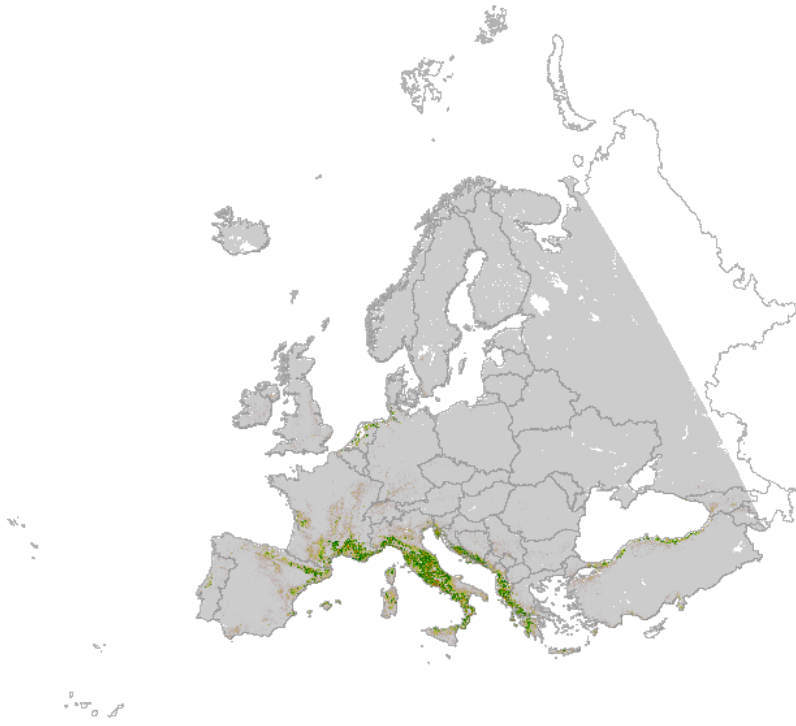
Equate entropy of thresholded and original distributions binomial probability: 1.50E-07

Source	•
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Metadata

File identifier	68ade09a-e970-4ad1-90cb-f2353a087ae1 XML								
Metadata language	English								
Character set	UTF8								
Hierarchy level	Dataset								
Date stamp	2022-01-31T13:40:25.162Z								
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



Provided by

