

EUNIS habitat type F7.3, 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: Prediction in the Iberian Peninsula should be ignored.

Simple

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	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"> terrestrial ecosystem natural area tundra heathland
Keywords	
Keywords	
Place	<ul style="list-style-type: none"> Europe
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



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-f7-3_p_1940-2011_v01_r00/F7-3_ed1.tif	
	WWW:URL	https://sdi.eea.europa.eu/data/4e5fa870-cd3b-4b2b-aceb-c1bbb80fcf5d	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: 54</p> <p>Regularized training gain: 3.6547</p>
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Unregularized training gain: 3.9416
Iterations: 500
Training AUC: 0.9935
#Test samples: 5
Test gain: 3.456
Test AUC: 0.9902
AUC Standard Deviation: 0.002
#Background points: 5054
bio_12_etr2_ras contribution: 0
bio_15_etr2_ras contribution: 49.1531
bio_18_etr2_ras contribution: 23.7552
bio_4_etr2_ras contribution: 13.0809
bio_8_etr2_ras contribution: 0.1344
bld_m_sd1_1km_eu_ll contribution: 0.1621
cecum_m_sd1_1km_eu_ll contribution: 0.0163
clyppt_m_sd1_1km_eu_ll contribution: 1.3448
crvol_m_sd1_1km_eu_ll contribution: 0.2328
dist2water1km contribution: 0.0032
orcdrc_m_sd1_1km_eu_ll contribution: 1.0544
pet_he_yr contribution: 10.193
phihox_m_sd1_1km_eu_ll contribution: 0.6572
sltppt_m_sd1_1km_eu_ll contribution: 0.0147
sndppt_m_sd1_1km_eu_ll contribution: 0.0856
solar_1km contribution: 0.1124
bio_12_etr2_ras permutation importance: 0
bio_15_etr2_ras permutation importance: 66.3024
bio_18_etr2_ras permutation importance: 0.1262
bio_4_etr2_ras permutation importance: 23.4347
bio_8_etr2_ras permutation importance: 0.3119
bld_m_sd1_1km_eu_ll permutation importance: 0.1595
cecum_m_sd1_1km_eu_ll permutation importance: 0.0405
clyppt_m_sd1_1km_eu_ll permutation importance: 0.0262
crvol_m_sd1_1km_eu_ll permutation importance: 0.6285
dist2water1km permutation importance: 0
orcdrc_m_sd1_1km_eu_ll permutation importance: 1.2308
pet_he_yr permutation importance: 2.7829
phihox_m_sd1_1km_eu_ll permutation importance: 3.6757
sltppt_m_sd1_1km_eu_ll permutation importance: 0.8761
sndppt_m_sd1_1km_eu_ll permutation importance: 0.0595
solar_1km permutation importance: 0.3452
Entropy: 4.8843
Prevalence (average of logistic output over background sites): 0.0121
Fixed cumulative value 1 cumulative threshold: 1

Fixed cumulative value 1 logistic threshold: 0.0036
Fixed cumulative value 1 area: 0.1173
Fixed cumulative value 1 training omission: 0
Fixed cumulative value 1 test omission: 0
Fixed cumulative value 1 binomial probability: 2.22E-05
Fixed cumulative value 5 cumulative threshold: 5
Fixed cumulative value 5 logistic threshold: 0.0458
Fixed cumulative value 5 area: 0.0386
Fixed cumulative value 5 training omission: 0
Fixed cumulative value 5 test omission: 0
Fixed cumulative value 5 binomial probability: 8.55E-08
Fixed cumulative value 10 cumulative threshold: 10
Fixed cumulative value 10 logistic threshold: 0.1365
Fixed cumulative value 10 area: 0.0239
Fixed cumulative value 10 training omission: 0
Fixed cumulative value 10 test omission: 0
Fixed cumulative value 10 binomial probability: 7.87E-09
Minimum training presence cumulative threshold: 12.7992
Minimum training presence logistic threshold: 0.1708
Minimum training presence area: 0.0198
Minimum training presence training omission: 0
Minimum training presence test omission: 0
Minimum training presence binomial probability: 3.03E-09
10 percentile training presence cumulative threshold: 19.3516
10 percentile training presence logistic threshold: 0.2726
10 percentile training presence area: 0.014
10 percentile training presence training omission: 0.0926
10 percentile training presence test omission: 0.2
10 percentile training presence binomial probability: 1.93E-07
Equal training sensitivity and specificity cumulative threshold: 13.1147
Equal training sensitivity and specificity logistic threshold: 0.1738
Equal training sensitivity and specificity area: 0.0194
Equal training sensitivity and specificity training omission: 0.0185
Equal training sensitivity and specificity test omission: 0
Equal training sensitivity and specificity binomial probability: 2.74E-09
Maximum training sensitivity plus specificity cumulative threshold: 12.7992
Maximum training sensitivity plus specificity logistic threshold: 0.1708
Maximum training sensitivity plus specificity area: 0.0198
Maximum training sensitivity plus specificity training omission: 0
Maximum training sensitivity plus specificity test omission: 0
Maximum training sensitivity plus specificity binomial probability: 3.03E-09
Equal test sensitivity and specificity cumulative threshold: 15.5867

Equal test sensitivity and specificity logistic threshold: 0.2255

Equal test sensitivity and specificity area: 0.0168

Equal test sensitivity and specificity training omission: 0.037

Equal test sensitivity and specificity test omission: 0

Equal test sensitivity and specificity binomial probability: 1.35E-09

Maximum test sensitivity plus specificity cumulative threshold: 15.5867

Maximum test sensitivity plus specificity logistic threshold: 0.2255

Maximum test sensitivity plus specificity area: 0.0168

Maximum test sensitivity plus specificity training omission: 0.037

Maximum test sensitivity plus specificity test omission: 0

Maximum test sensitivity plus specificity binomial probability: 1.35E-09

Balance training omission, predicted area and threshold value cumulative threshold: 2.0977

Balance training omission, predicted area and threshold value logistic threshold: 0.0103

Balance training omission, predicted area and threshold value area: 0.073

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: 2.08E-06

Equate entropy of thresholded and original distributions cumulative threshold: 8.8366

Equate entropy of thresholded and original distributions logistic threshold: 0.1086

Equate entropy of thresholded and original distributions area: 0.0261

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: 1.21E-08

Source

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Metadata

File identifier	4e5fa870-cd3b-4b2b-aceb-c1bbb80fc5d XML		
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	European Environment Agency		sdi@eea.europa.eu Point of contact

Overviews



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