

EUNIS habitat type F5.5, 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: -

Simple

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Edition	01			
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Status	Obsolete			
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-f5-5_p_1940-2011_v01_r00/F5-5_ed1.tif	
	WWW:URL	https://sdi.eea.europa.eu/data/efad509-24f2-415c-9eee-ea21c71db0ee	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: 89</p> <p>Regularized training gain: 3.1942</p>
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Unregularized training gain: 3.3928
Iterations: 500
Training AUC: 0.9874
#Test samples: 9
Test gain: 3.049
Test AUC: 0.9814
AUC Standard Deviation: 0.0083
#Background points: 5089
bio_12_etr2_ras contribution: 0.0773
bio_15_etr2_ras contribution: 11.8497
bio_18_etr2_ras contribution: 28.1046
bio_4_etr2_ras contribution: 38.2369
bio_8_etr2_ras contribution: 7.9066
bld_m_sd1_1km_eu_ll contribution: 0.3056
cecum_m_sd1_1km_eu_ll contribution: 0
clyppt_m_sd1_1km_eu_ll contribution: 3.5663
crvol_m_sd1_1km_eu_ll contribution: 0.7313
dist2water1km contribution: 0.0443
orcdrc_m_sd1_1km_eu_ll contribution: 0.3801
pet_he_yr contribution: 2.799
phihox_m_sd1_1km_eu_ll contribution: 2.0164
sltppt_m_sd1_1km_eu_ll contribution: 2.5521
sndppt_m_sd1_1km_eu_ll contribution: 0.7747
solar_1km contribution: 0.655
bio_12_etr2_ras permutation importance: 0.2875
bio_15_etr2_ras permutation importance: 8.3641
bio_18_etr2_ras permutation importance: 3.151
bio_4_etr2_ras permutation importance: 69.2011
bio_8_etr2_ras permutation importance: 4.3301
bld_m_sd1_1km_eu_ll permutation importance: 0.5779
cecum_m_sd1_1km_eu_ll permutation importance: 0
clyppt_m_sd1_1km_eu_ll permutation importance: 3.0755
crvol_m_sd1_1km_eu_ll permutation importance: 0.1684
dist2water1km permutation importance: 0.0726
orcdrc_m_sd1_1km_eu_ll permutation importance: 0.8829
pet_he_yr permutation importance: 0.5866
phihox_m_sd1_1km_eu_ll permutation importance: 5.4686
sltppt_m_sd1_1km_eu_ll permutation importance: 1.9371
sndppt_m_sd1_1km_eu_ll permutation importance: 0.6563
solar_1km permutation importance: 1.2401
Entropy: 5.3461
Prevalence (average of logistic output over background sites): 0.019
Fixed cumulative value 1 cumulative threshold: 1

Fixed cumulative value 1 logistic threshold: 0.0028
Fixed cumulative value 1 area: 0.2154
Fixed cumulative value 1 training omission: 0
Fixed cumulative value 1 test omission: 0
Fixed cumulative value 1 binomial probability: 9.97E-07
Fixed cumulative value 5 cumulative threshold: 5
Fixed cumulative value 5 logistic threshold: 0.0408
Fixed cumulative value 5 area: 0.058
Fixed cumulative value 5 training omission: 0.0337
Fixed cumulative value 5 test omission: 0.1111
Fixed cumulative value 5 binomial probability: 1.09E-09
Fixed cumulative value 10 cumulative threshold: 10
Fixed cumulative value 10 logistic threshold: 0.1482
Fixed cumulative value 10 area: 0.0336
Fixed cumulative value 10 training omission: 0.0562
Fixed cumulative value 10 test omission: 0.1111
Fixed cumulative value 10 binomial probability: 1.42E-11
Minimum training presence cumulative threshold: 2.3692
Minimum training presence logistic threshold: 0.0103
Minimum training presence area: 0.1089
Minimum training presence training omission: 0
Minimum training presence test omission: 0
Minimum training presence binomial probability: 2.15E-09
10 percentile training presence cumulative threshold: 19.7599
10 percentile training presence logistic threshold: 0.3669
10 percentile training presence area: 0.0212
10 percentile training presence training omission: 0.0899
10 percentile training presence test omission: 0.1111
10 percentile training presence binomial probability: 3.63E-13
Equal training sensitivity and specificity cumulative threshold: 8.207
Equal training sensitivity and specificity logistic threshold: 0.1058
Equal training sensitivity and specificity area: 0.0389
Equal training sensitivity and specificity training omission: 0.0337
Equal training sensitivity and specificity test omission: 0.1111
Equal training sensitivity and specificity binomial probability: 4.56E-11
Maximum training sensitivity plus specificity cumulative threshold: 8.207
Maximum training sensitivity plus specificity logistic threshold: 0.1058
Maximum training sensitivity plus specificity area: 0.0389
Maximum training sensitivity plus specificity training omission: 0.0337
Maximum training sensitivity plus specificity test omission: 0.1111
Maximum training sensitivity plus specificity binomial probability: 4.56E-11
Equal test sensitivity and specificity cumulative threshold: 3.1088

Equal test sensitivity and specificity logistic threshold: 0.0176

Equal test sensitivity and specificity area: 0.0869

Equal test sensitivity and specificity training omission: 0.0225

Equal test sensitivity and specificity test omission: 0.1111

Equal test sensitivity and specificity binomial probability: 2.69E-08

Maximum test sensitivity plus specificity cumulative threshold: 3.1066

Maximum test sensitivity plus specificity logistic threshold: 0.0176

Maximum test sensitivity plus specificity area: 0.0869

Maximum test sensitivity plus specificity training omission: 0.0225

Maximum test sensitivity plus specificity test omission: 0

Maximum test sensitivity plus specificity binomial probability: 2.81E-10

Balance training omission, predicted area and threshold value cumulative threshold: 2.3692

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

Balance training omission, predicted area and threshold value area: 0.1089

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: 2.15E-09

Equate entropy of thresholded and original distributions cumulative threshold: 7.6554

Equate entropy of thresholded and original distributions logistic threshold: 0.0877

Equate entropy of thresholded and original distributions area: 0.0411

Equate entropy of thresholded and original distributions training omission: 0.0337

Equate entropy of thresholded and original distributions test omission: 0.1111

Equate entropy of thresholded and original distributions binomial probability: 7.02E-11

Source	•
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Metadata

File identifier	eefad509-24f2-415c-9eee-ea21c71db0ee XML		
Metadata language	English		
Character set	UTF8		
Hierarchy level	Dataset		
Date stamp	2022-01-31T13:45:23.423Z		
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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