

EUNIS habitat type F2.2a, 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

Date (Publication)	2016-07-01			
Date (Creation)	2016-07-06			
Edition	01			
Citation identifier	eea_r_3035_1_km_eunis-hab-f2-2a_p_1940-2011_v01_r00			
Status	Obsolete			
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
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

	N		S		E		W
--	---	--	---	--	---	--	---



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-f2-2a_p_1940-2011_v01_r00/F2-2a_ed1.tif	
	WWW:URL	https://sdi.eea.europa.eu/data/c456eebe-180f-4c9f-afba-7b3179a72bfc	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: 1070</p> <p>Regularized training gain: 1.3458</p>
------------------	---

Unregularized training gain: 1.4095
Iterations: 500
Training AUC: 0.901
#Test samples: 118
Test gain: 1.2721
Test AUC: 0.8861
AUC Standard Deviation: 0.0075
#Background points: 6070
bio_12_etr2_ras contribution: 33.5265
bio_15_etr2_ras contribution: 0.1903
bio_18_etr2_ras contribution: 9.6382
bio_4_etr2_ras contribution: 1.0636
bio_8_etr2_ras contribution: 0.5933
bld_m_sd1_1km_eu_ll contribution: 2.8496
cecum_m_sd1_1km_eu_ll contribution: 0.6751
clyppt_m_sd1_1km_eu_ll contribution: 1.2887
crvol_m_sd1_1km_eu_ll contribution: 18.1061
dist2water1km contribution: 0
orcdrc_m_sd1_1km_eu_ll contribution: 11.4909
pet_he_yr contribution: 3.6068
phihox_m_sd1_1km_eu_ll contribution: 0.1302
sltppt_m_sd1_1km_eu_ll contribution: 1.8458
sndppt_m_sd1_1km_eu_ll contribution: 0.6931
solar_1km contribution: 14.3018
bio_12_etr2_ras permutation importance: 1.0794
bio_15_etr2_ras permutation importance: 0.6918
bio_18_etr2_ras permutation importance: 7.8141
bio_4_etr2_ras permutation importance: 6.4946
bio_8_etr2_ras permutation importance: 0.9379
bld_m_sd1_1km_eu_ll permutation importance: 0.5402
cecum_m_sd1_1km_eu_ll permutation importance: 4.6098
clyppt_m_sd1_1km_eu_ll permutation importance: 5.4915
crvol_m_sd1_1km_eu_ll permutation importance: 56.308
dist2water1km permutation importance: 0
orcdrc_m_sd1_1km_eu_ll permutation importance: 2.8099
pet_he_yr permutation importance: 10.1387
phihox_m_sd1_1km_eu_ll permutation importance: 0.3418
sltppt_m_sd1_1km_eu_ll permutation importance: 0.5011
sndppt_m_sd1_1km_eu_ll permutation importance: 1.1682
solar_1km permutation importance: 1.0731
Entropy: 7.3657
Prevalence (average of logistic output over background sites): 0.1264
Fixed cumulative value 1 cumulative threshold: 1

Fixed cumulative value 1 logistic threshold: 0.0349
Fixed cumulative value 1 area: 0.3572
Fixed cumulative value 1 training omission: 0.0047
Fixed cumulative value 1 test omission: 0.0169
Fixed cumulative value 1 binomial probability: 5.36E-46
Fixed cumulative value 5 cumulative threshold: 5
Fixed cumulative value 5 logistic threshold: 0.1584
Fixed cumulative value 5 area: 0.2453
Fixed cumulative value 5 training omission: 0.0234
Fixed cumulative value 5 test omission: 0.0593
Fixed cumulative value 5 binomial probability: 0.00E+00
Fixed cumulative value 10 cumulative threshold: 10
Fixed cumulative value 10 logistic threshold: 0.2848
Fixed cumulative value 10 area: 0.199
Fixed cumulative value 10 training omission: 0.0561
Fixed cumulative value 10 test omission: 0.0932
Fixed cumulative value 10 binomial probability: 0.00E+00
Minimum training presence cumulative threshold: 0.1003
Minimum training presence logistic threshold: 0.002
Minimum training presence area: 0.6049
Minimum training presence training omission: 0
Minimum training presence test omission: 0
Minimum training presence binomial probability: 8.29E-19
10 percentile training presence cumulative threshold: 13.5366
10 percentile training presence logistic threshold: 0.3562
10 percentile training presence area: 0.1797
10 percentile training presence training omission: 0.1
10 percentile training presence test omission: 0.1441
10 percentile training presence binomial probability: 0.00E+00
Equal training sensitivity and specificity cumulative threshold: 18.1358
Equal training sensitivity and specificity logistic threshold: 0.435
Equal training sensitivity and specificity area: 0.1616
Equal training sensitivity and specificity training omission: 0.1617
Equal training sensitivity and specificity test omission: 0.2119
Equal training sensitivity and specificity binomial probability: 0.00E+00
Maximum training sensitivity plus specificity cumulative threshold: 8.2314
Maximum training sensitivity plus specificity logistic threshold: 0.2444
Maximum training sensitivity plus specificity area: 0.2117
Maximum training sensitivity plus specificity training omission: 0.0411
Maximum training sensitivity plus specificity test omission: 0.0847
Maximum training sensitivity plus specificity binomial probability: 0.00E+00
Equal test sensitivity and specificity cumulative threshold: 14.1477

Equal test sensitivity and specificity logistic threshold: 0.3691

Equal test sensitivity and specificity area: 0.1769

Equal test sensitivity and specificity training omission: 0.1075

Equal test sensitivity and specificity test omission: 0.178

Equal test sensitivity and specificity binomial probability: 0.00E+00

Maximum test sensitivity plus specificity cumulative threshold: 6.807

Maximum test sensitivity plus specificity logistic threshold: 0.2098

Maximum test sensitivity plus specificity area: 0.2242

Maximum test sensitivity plus specificity training omission: 0.0299

Maximum test sensitivity plus specificity test omission: 0.0593

Maximum test sensitivity plus specificity binomial probability: 0.00E+00

Balance training omission, predicted area and threshold value cumulative threshold: 1.5235

Balance training omission, predicted area and threshold value logistic threshold: 0.0551

Balance training omission, predicted area and threshold value area: 0.3278

Balance training omission, predicted area and threshold value training omission: 0.0056

Balance training omission, predicted area and threshold value test omission: 0.0254

Balance training omission, predicted area and threshold value binomial probability: 6.14E-51

Equate entropy of thresholded and original distributions cumulative threshold: 4.0404

Equate entropy of thresholded and original distributions logistic threshold: 0.1289

Equate entropy of thresholded and original distributions area: 0.2603

Equate entropy of thresholded and original distributions training omission: 0.0187

Equate entropy of thresholded and original distributions test omission: 0.0508

Equate entropy of thresholded and original distributions binomial probability: 0.00E+00

Metadata

File identifier	c456eebe-180f-4c9f-afba-7b3179a72bfc XML		
Metadata language	English		
Character set	UTF8		
Hierarchy level	Dataset		
Date stamp	2024-04-12T12:14:48.053508Z		
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



Provided by

