JRC Dataset

Maximum habitat suitability map of Ostrya carpinifolia (2006, FISE, RDS-MHSv0-3-2)

Description:

This dataset series shows the Maximum Habitat Suitability (MHS, also known as survivability) map of Ostrya carpinifolia (raster format: geotiff). The survivability map is provided for Europe (EU28 plus part of other countries within the spatial extent), computed using the FISE harmonised European dataset of taxa presence/absence (based on the integration and harmonisation of the datasets by European National Forestry Inventories; BioSoil; Forest Focus/Monitoring; EUFGIS; GeneticDiversity). The survivability is estimated as the maximum extension of habitat suitability by means of statistical multivariate similarity analysis (Relative Distance Similarity, RDS) of the bio-climatic conditions where the taxon is observed in Europe (RDS Maximum Habitat Suitability, RDS-MHS). Available years: 2006. The maps are available in the Forest Information System for Europe (FISE). FISE is run by the European Commission, Joint Research Centre. See the field Lineage for further information. When using these data, please cite the relevant data sources. A suggested citation is included in the following: - Various authors, 2016. Ostrya carpinifolia in Europe: an outline on distribution, habitat, importance and threats. In: Online European Atlas of Forest Tree Species. FISE Comm. Publications Office of the European Union. pp. e01fd3d+. (Under review: please, check the current status at: https://w3id.org/mtv/FISE-Comm/v01/e01fd3d) - de Rigo, D., Caudullo, G., Houston Durrant, T., San-Miguel-Ayanz, J., 2016. The European Atlas of Forest Tree Species: modelling, data and information on forest tree species. In: San-Miguel-Ayanz, J., de Rigo, D., Caudullo, G., Houston Durrant, T., Mauri, A. (Eds.), European Atlas of Forest Tree Species. Publ. Off. EU, Luxembourg, pp. e01aa69+. https://w3id.org/mtv/FISE-Comm/v01/e01aa69 -

Keywords:

Europe, FISE, Habitats and biotopes, Model: Relative Distance Similarity (RDS-MHS), Modelled quantity: Maximum Habitat Suitability (MHS), Modelling paradigm: Geospatial Semantic Array Programming (GeoSemAP), Taxonomy division type: Broadleaved, Taxonomy family: Betulaceae, Taxonomy genus: Ostrya, Taxonomy species: Ostrya carpinifolia, forest, forest resource, mathematical analysis, modelling, natural resource, scientific research, spatial distribution, tree

Related resources:

Data access

[VIEW] [WMS] INSPIRE View Service

INSPIRE compliant view service for maps of Ostrya carpinifolia survivability (maximum extension of habitat suitability) for the current situation (year 2006; forest tree species data: FISE)

https://w3id.org/mtv/FISE/map-MHS/v0-3-2/internet/Ostrya-carpinifolia

[Download] Data Download Service

Data download service for maps of Ostrya carpinifolia survivability (maximum extension of habitat suitability) for the current situation (year 2006; forest tree species data: FISE)

https://w3id.org/mtv/FISE/map-data-MHS/v0-3-2/internet/Ostrya-carpinifolia

Additional information:

Last Modified: 2014-01-08

Issue date: 2016-08-01

Landing page: https://w3id.org/mtv/FISE-Comm/v01/e01fd3d/map-MHS

Temporal coverage: From: 2006-01-01 – To: 2006-12-31

Language: English

Data theme(s): Environment

EuroVoc domain(s): 52 ENVIRONMENT; 56 AGRICULTURE, FORESTRY AND FISHERIES; 64 PRODUCTION, TECHNOLOGY AND RESEARCH

EuroVoc concept(s): biotope; forest; scientific research; tree

Identifier: http://data.europa.eu/89h/cba41005-4396-4cdf-adc0-08c132c83855

Geographic information:

Lineage: The data refer to the European Atlas of forest Tree Species [1]. The survivability model (or maximum habitat suitability model) relies on statistical multivariate similarity analysis (Relative Distance Similarity, RDS) of the bio-climatic conditions where the taxon is observed in Europe (RDS Maximum Habitat Suitability, RDS-MHS) [2-5] as implemented by using the Mastrave modelling library [6,7] within the GNU Octave computational environment [8] and the GDAL library [9] within the Python computational environment [10]. Forest tree species presence/absence information has been used from the harmonised datasets in the Forest Information System for Europe (FISE). Dataset version: 0-3-2. References: [1] Various authors, 2016. Ostrya carpinifolia in Europe: an outline on distribution, habitat, importance and threats. In: Online European Atlas of Forest Tree Species. FISE Comm. Publications Office of the European Union. pp. e01fd3d+. (Under review: please, check the current status at: https://w3id.org/mtv/FISE-Comm/v01/e01fd3d) [2] de Rigo, D., Caudullo, G., Barredo, J.I., San-Miguel_Ayanz, J., exp. 2016. Modelling impacts of anthropogenic climate change on habitat suitability of European forest tree species: the case of Abies alba (in preparation) [3] de Rigo, D., Caudullo, G., Busetto, L., San-Miguel-Ayanz, J., 2014. Supporting EFSA assessment of the EU environmental suitability for exotic forestry pests: Final report. EFSA Supporting Publications 2014 (EN-434), 61pp. ([http://mfkp.org/INRMM/article/13114000 INRMM-MiD:13114000]) [4] de Rigo, D., Caudullo, G., Houston Durrant, T., San-Miguel-Ayanz, J., 2016. The European Atlas of Forest Tree Species: modelling, data and information on forest tree species. In: San-Miguel-Ayanz, J., de Rigo, D., Caudullo, G., Houston Durrant, T., Mauri, A. (Eds.), European Atlas of Forest Tree Species. Publ. Off. EU, Luxembourg, pp. e01aa69+. [5] de Rigo, D., Barredo, J. I., Busetto, L., Caudullo, G., San-Miguel-Ayanz, J., 2013. Continental-scale living forest biomass and carbon stock: a robust fuzzy ensemble of IPCC Tier 1 maps for Europe. IFIP Advances in Information and Communication Technology 413, 271-284. ([http://mfkp.org/INRMM/article/12541209 INRMM-MiD:12541209]) [6] de Rigo, D., 2012. Semantic Array Programming with Mastrave - Introduction to Semantic Computational Modelling. The Mastrave project. http://mastrave.org/doc/MTV-1.012-1 [7] de Rigo, D., 2012. Semantic array programming for environmental modelling: Application of the Mastrave library. In: Seppelt, R., Voinov, A. A., Lange, S., Bankamp, D. (Eds.), International Environmental Modelling and Software Society (iEMSs) 2012 International Congress on Environmental Modelling and Software. Managing Resources of a Limited Planet: Pathways and Visions under Uncertainty, Sixth Biennial Meeting. pp. 1167-1176. ([http://mfkp.org/INRMM/article/12227965 INRMM-MiD:12227965]) [8] Eaton, J. W., Bateman, D., Hauberg, S., 2008. GNU Octave: a high-level interactive language for numerical computations. Network Theory. ([http://mfkp.org/INRMM/article/9115371 INRMM-MiD:9115371]) [9] Warmerdam, F., 2008. The geospatial data abstraction library. In: Hall, G. B., Leahy, M. G. (Eds.), Open Source Approaches in Spatial Data Handling. Vol. 2 of Advances in Geographic Information Science. Springer Berlin Heidelberg, pp. 87-104. ([http://mfkp.org/INRMM/article/11894781 INRMM-MiD:11894781]) [10] Drake, F. L., van Rossum, G., 2011. The Python Language Reference Manual: for Python version 3,2. Network theory Ltd. ([http://mfkp.org/INRMM/article/11232719 INRMM-MiD:11232719])

Geographic bounding box: 67.658° N, 74.359° E, 28.922° S, -36.684° W

Coordinate Reference System: ETRS89 / LAEA Europe