



Data Request Form

To obtain data from the European Vegetation Archive (EVA), please first make an enquiry to the EVA database administrator Ilona Knollová (ikuzel@sci.muni.cz) whether the data meeting your needs are available. If they are, please fill in the form below and submit it to Ilona or another member of the EVA Coordinating Board.

- Applicant's name:

Christian Berg, Patrick Schwager

- Applicant's institutional address:

University of Graz, Institute of Biology, Department of Plant Science

- Applicant's e-mail:

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- Project title:

Remotely sensed temperature predictors for Habitat Suitability Models

- Brief description of aims and methods of the study:

Habitat Suitability Models (HSM) are extensively used in ecological research, applied ecology or conservation biology (e.g. Guisan et al. 2017). Typically, these models use climate data that were interpolated from a great number of meteorological measuring stations that are not uniformly, and in some regions only sparsely distributed. However, an often criticised aspect is that interpolated climate data do not adequately reflect the on-site habitat conditions. Land surface temperature can differ greatly compared to temperatures that are measured from standard meteorological measuring stations two meters above ground. This especially applies in alpine ecosystems which are generally associated with cold habitat conditions.

Our aim is to calibrate habitat suitability models for vascular plant species in the European Alps using different data sources for temperature related predictor variables. The datasets are compiled either from interpolated meteorological measuring stations (WorldClim v 1.4, Chelsa v 1.2), from hybrid sources, that use satellite derived covariates in the interpolation process (WorldClim v 2.0), or from land surface temperatures (EuroLST) only. Georeferenced plot data, covering the whole Alps, are therefore an essential data source for our models. We only use occurrence data of the selected species. The study is part of the Alpine Seed Conservation and Research Network.

- Will someone else be involved in data editing or analysis in addition to the applicant?

Only members of the applicant's working group at the university of Graz and Salzburg assist in the data analysis. The confidential use of the data is guaranteed.

- Estimated time of delivery of results (e.g. manuscript submission):

1 year after data delivery

- Geographic area needed (e.g. countries or range of geographic coordinates):

Relevés that fall inside the Alpine area, defined by the Alpine Convention:



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<http://www.alpconv.org/EN/ALPINEKNOWLEDGE/pages/Perimeter.aspx?AspxAutoDetectCookieSupport=1>

- Do you need plots to be georeferenced? If so, what is the minimum accuracy of plot location (in metres or kilometres) needed for your project?

Yes, minimum accuracy 5 km

- Vegetation types needed (syntaxa):

Relevés with occurrence records of 27 Alpine plant species listed below:

Oreochloa disticha, Persicaria vivipara, Helianthemum alpestre, Dryas octopetala, Carex firma, Sesleria albicans, Potentilla clusiana, Valeriana celtica ssp. norica, Galium noricum, Heracleum austriacum, Primula minima, Campanula pulla, Primula clusiana, Silene acaulis, Agrostis ruppestris, Carex curvula, Primula glutinosa, Saxifraga paniculata, Saxifraga androsace, Saxifraga blepharophylla, Saxifraga rotundifolia, Saxifraga moschata, Saxifraga aizoides, Saxifraga caesia, Saxifraga bryoides, Saxifraga stellaris, Festuca norica

- Other data selection criteria:

None

- Envisaged publications:

At least 1 publications

- Plant trait data from the TRY consortium. If you plan to combine your analysis of vegetation-plot data with plant trait data, you can also request for a dataset of 18 gap-filled traits for a large number of plant taxa prepared by the TRY consortium. These traits include Leaf area, Specific leaf area, Leaf fresh mass, Leaf dry matter content, Leaf C, Leaf N, Leaf P, Leaf N per area, Leaf N:P ratio, Leaf delta15N, Seed mass, Seed length, Seed number per reproductive unit, Dispersal unit length, Plant height, Stem specific density, Stem conduit density, and Conduit element length. This dataset can be provided to you from the EVA manager together with the vegetation-plot data. If you use this dataset, you must inform about your project the TRY data contributors who might be potentially interested and invite them as potential co-authors, assuming they will make an intellectual contribution to your paper. The list of the TRY data contributors will be sent to you together with the gap-filled trait dataset.

No

- Specification of the co-authorship arrangements in publications based on the requested data. Note that the EVA Rules recommend that co-authorship is offered to a representative of each database providing data that are particularly important for the project (e.g. unique vegetation types, under-represented geographic areas) or make up more than 10% of the final dataset (5% threshold can be considered too). These database representatives should be experts in the topic of the project (they do not need to be the custodians or deputy custodians) and they should contribute to the project more than just by providing the existing data, e.g. by intellectual contribution to the concept of the paper, preparation of new data, or helping with data analysis, interpretation of the results or writing parts of the paper (see the IAVS Code of Professional Ethics: <http://iavs.org/Governance/Code-of-Professional-Ethics.aspx>). The project leader should enable active participation by regularly informing potential co-authors about the progress of the project from its early stage. The project leader should also make final co-authorship arrangements based on the real input of the individual contributors.



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Each database whose data are used in this project is entitled to nominate one contributor to be added to the preliminary list of co-authors within 3 weeks after receipt of this request from the EVA Database Manager. We expect the nominated person to be an expert of the focal vegetation type and to contribute actively to the analyses and/or the writing. We will accept one such nomination from each database that contributes at least 5% of the final dataset, but we might additionally consider nominations of opt-in authors from smaller databases if the opt-in mail convinces us that the nominated person will provide valuable expertise to the paper. All persons on the preliminary list of co-authors will regularly be informed about the status of the project and thus have multiple chances to contribute to analyses and/or writing. In accordance with the IAVS Code of Professional Ethics we will remove opt-in authors from the final author list at submission who did not make substantial intellectual contributions during the whole process.

- Eligibility of the applicant to receive EVA data. Specify to which EVA database the applicant has contributed; if the applicant is not the custodian or deputy custodian of an EVA database, give a name of a custodian or deputy custodian who supports this data request.

Christian Berg is Deputy Custodian of VegMV (EU-AT-001) and Austrian Vegetation Database (ID EU-DE-001).

I agree with the terms of EVA Data Property and Governance Rules as approved on 26 May 2012 (<http://euroveg.org/download/eva-rules.pdf>).

If I ask for the plant trait data from TRY, I agree to invite to my project the TRY data contributors following the list received from the EVA database manager.

Graz, 26.04.2019

Schwager Patrick