



European Vegetation Archive Data Request Form



To obtain data from the European Vegetation Archive (EVA), including the ReSurveyEurope Database, please first enquire the EVA database administrator Ilona Knollová (ikuzel@sci.muni.cz) whether the data that meet 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 (or ReSurveyEurope Board if you ask for data from the ReSurveyEurope Database).

- Applicant's name:

Wenyong Guo; Petr Pyšek

- Applicant's institutional address:

East China Normal University, Shanghai, P. R. China; Czech Academy of Sciences,
Institute of Botany

- Applicant's e-mail:

guowhygy@gmail.com

- Project title:

Dynamics of multi-dimensional diversity (richness, phylogenetic and functional diversity) of native and alien species along elevation and latitudinal gradients

- Are you asking for core EVA data (non-repeated vegetation surveys) or for ReSurveyEurope data (repeated vegetation surveys)?

ReSurveyEurope data

- Brief description of the aims and methods of the study:

- In this proposed project, the aim is to check temporary dynamics of multi-dimensional diversity (richness, phylogenetic and functional diversity) between native, native-alien, and alien plots, particularly along elevation, but it would be interesting to compare the elevational patterns with latitudinal patterns with respect to those diversity metrics, even between different land-use histories, including protected areas, etc., to investigate the possible factors affecting those patterns. In addition, it would also be interesting to check the temporary dynamics of plant networks and the driving factors, for example, how did plant networks change over time, e.g., increasing modularity and replacement of keystone species (maybe by non-native species)? Whether the species-based networks showed different temporal trends compared to trait-based networks? Whether the temporal changes showed a spatial pattern, e.g., mountain vs non-mountain areas show a reverse trend. We can further link these network features to abiotic (local factors like soil property and regional property like climate) and biotic (e.g., numbers of non-native species) factors.
- By linking the temporary plot surveys plus environmental gradients, it could be possible to reveal some insightful patterns of how aliens influence local native communities and how these effects change, possibly along with future climate change and human activities.



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

Yes, our colleague, Dr. Kun Guo, will be involved in the data analysis later

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

If the data is ready, we expect we can have the work done within 1 or 1½ years.

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

European continent if possible

- 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, it would be great to have the georeferenced data in metre

- Vegetation types needed (syntaxa):

No specific type

- Other data selection criteria:

No

- Envisaged publications:

Depending on the results, certain high-profile journals could be potential targets.

- **Data deposition.** Some journals require data used for the analysis to be stored in a public repository to ensure the repeatability of the analysis. According to EVA Rules, you are not allowed to store the original vegetation-plot data obtained from EVA. However, if you plan to publish in such a journal, you may deposit a reduced EVA-derived dataset that (1) would make it possible to repeat the analysis published in the paper and (2) does not contain any information not used in the analysis. For example, such a dataset can contain only a subset of species (e.g., only angiosperms or only neophytes), or replace species names with codes, or replace species cover values with presences/absences, or remove all the header data, or replace the exact plot coordinates by coarse grid-cell coordinates etc. If you plan to deposit reduced information from vegetation plots, please describe here what might be deposited. If the project developed so that you needed to deposit more information than specified here, you would need to ask specific permission from the Custodians of the EVA databases used in your analysis before the dataset is deposited.

It depends on the journal's request. What we can expect is that we can provide plot types and their numbers, species list with invasive status. And it is also possible to say people interested are encouraged to contact the authors for more information about the data.

- **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 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 by 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.



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Yes

- 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., a relatively large proportion of the final dataset used in the analyses or data from unique vegetation types or under-represented geographic areas). This database representative should be an expert in the topic of the project (not necessarily the custodian or deputy custodian), and this person 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.

We are welcome any contributors to be the co-authors if they are interested.

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

Franz Essl is supporting this proposal.

- 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 ReSurveyEurope data, I agree with the terms of ReSurveyEurope Data Property and Governance Rules as approved on 6 April 2022 (<http://euroveg.org/download/resurveyeurope-rules.pdf>).
- In any result obtained based on EVA core data (non-repeated vegetation surveys), I will cite the EVA report article (Chytrý et al. 2016; <https://doi.org/10.1111/avsc.12191>). In any result obtained based on the ReSurveyEurope data (repeated vegetation surveys), I will cite the ReSurveyEurope report article as soon as it is published. In addition, I will cite individual source databases used in my project (if possible, in the list of References; if not possible, at least as a list of databases in the electronic supplementary material).
- 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.

Shanghai, 20 December, 2022

Wenyong Guo