

Conference Abstract

A minimum set of Information Standards for Essential Biodiversity Variables

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Abstract

Essential Biodiversity Variables (EBVs) are integrated information products typically derived from disparate sources of primary observations combined by the use of biodiversity models and data integration algorithms. Furthermore, developing policy-relevant indicators from EBVs requires an additional level of integration between datasets that inform on different facets of biodiversity, e.g. at levels from species to ecosystems. The development and dissemination of EBVs requires that the origin of the primary observations, models and algorithms, measurement uncertainties, and the scope of application are consistently reported and traceable. To support this process, the GEO BON Taskforce for Essential Biodiversity Variables - Data is developing the Minimum Information Standards (MIS) for EBVs. MIS are sets of specifications for describing datasets that aim to standardize data reporting and to maximize its discoverability and interoperability. Here we present a community effort to generate minimum standards that can be used across all the EBV classes, including genetic composition, species populations and traits, and the composition, structure and function of ecosystems. MIS for Essential Biodiversity Variables is founded in the description of the EBV-data cube as the unifying framework to deliver interoperable biodiversity observations. They summarize aspects of the spatial and temporal domains of the datasets, as well as uncertainty and bias reporting. Furthermore, they identify traceability along the EBV production workflow from the identification of

primary observations to the derivation of a spatially and temporally consistent EBV product. MIS also incorporate the GEOSS proposed principles for data management. Finally, a metadata publishing toolkit ensures that EBVs are discoverable and used under the auspices of GEO BON.

Keywords

Biodiversity policy, biodiversity change, Metadata, Monitoring, Workflows

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