

# **Biodiversity Data Cubes for Cross-Cutting Science and Policy**

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iDiv/MLU





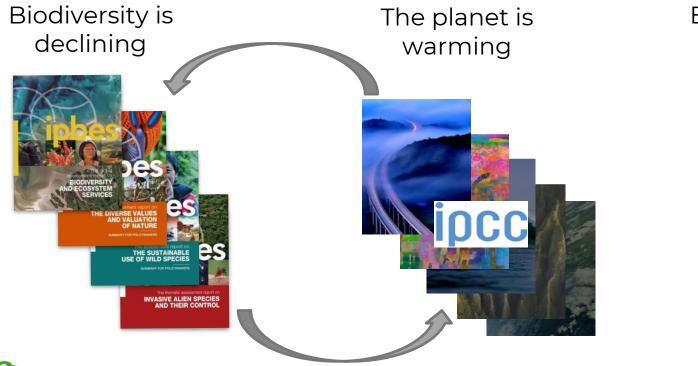




EGU - Biodiversity from a Geoscience perspective/17.04.2023/Vienna



# **Global challenges**



Evidence-based policymaking



Knowledge4Policy Science4Policy Smart4Policy



**Biodiversity Building Blocks for policy** 

## **Biodiversity Building Blocks for Policy** (B-Cubed Project)

Aim

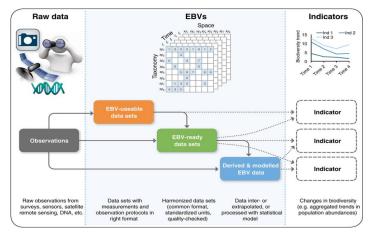


To support rapid, reliable and repeatable biodiversity monitoring data which decision

makers can use to evaluate policy



#### **Essential Biodiversity Variables**

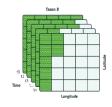


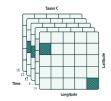
Kissling et al. 2018. Biol. Rev. (2018), 93, pp. 600-625.



GBIF

#### Species occurrence cubes





>2.6 billion species occurrence records from 2,195 publishing institutions



# **First outcomes**

#### **Cube generation software**

This feature implementation will continue throughout 2024.

#### Making cubes on Ms Azure Databricks

https://techdocs.gbif.org/en/datause/data-cubes

#### **GBIF API SQL Downloads**

API SQL Downloads – Functions Data Cubes https://techdocs.gbif.org/en/data-use/bcubed/generate-cube-databricks

#### **B-Cubed workflows**

To operationalize models and indicators while ensuring consistent and repeatable results for policy.

- Alignment with policy and other biodiversity initiatives
- Biodiversity Indicators
- Modelling Scenarios Present and future climate

#### **B-Cubed Hackathon**





https://github.com/b-cubed-eu/hackathon-projects-2024/



Impacts of alien taxa indicators

$\mathbf{\mathbf{x}}$

**Suitability cube** 



Biodiversity Building Blocks for policy

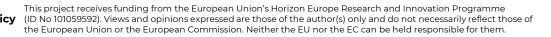
# Thank you!

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**B-Cubed Project** 



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