

# SeagrassTraitDB: a seagrasses traits database

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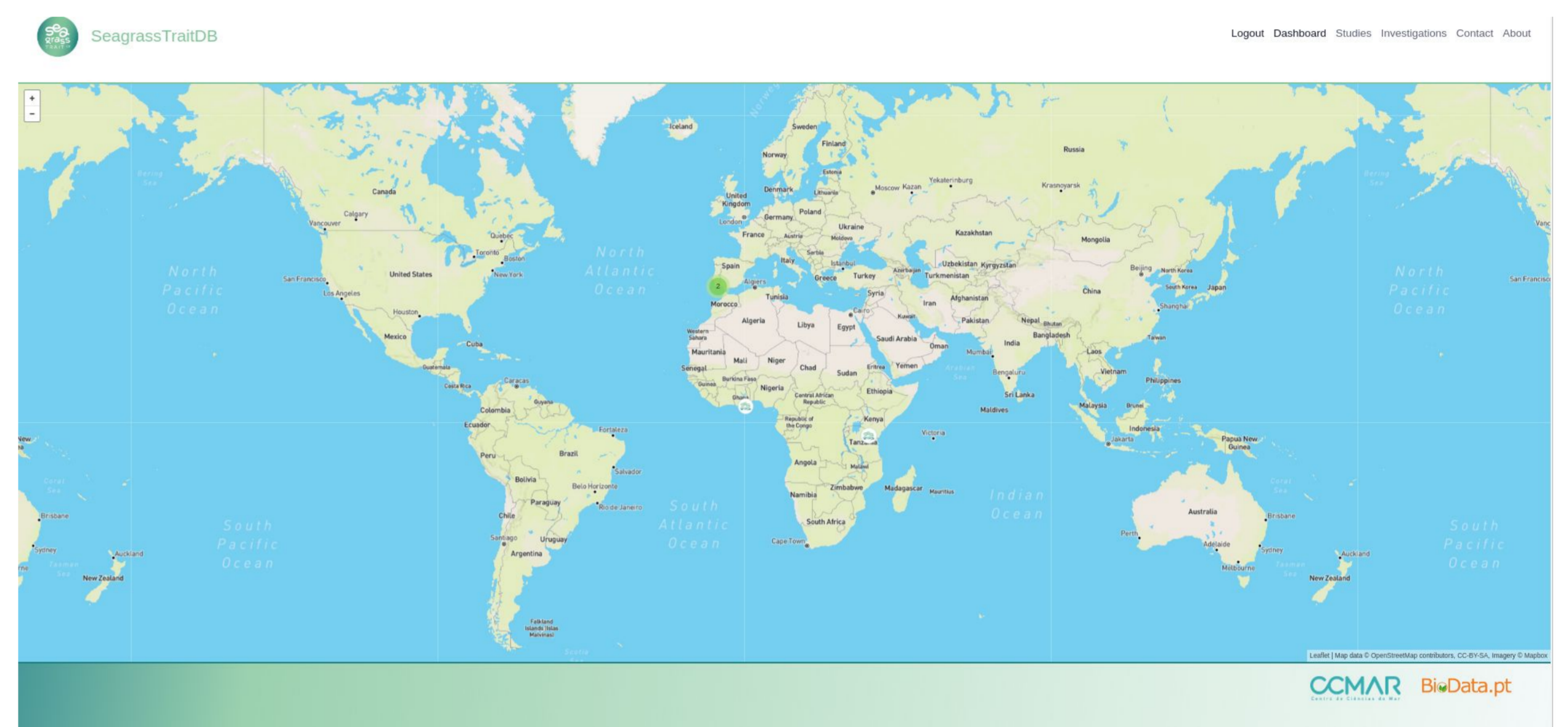
1st BioData.pt **elixir** All Hands 3rd Technical Meeting

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## Summary

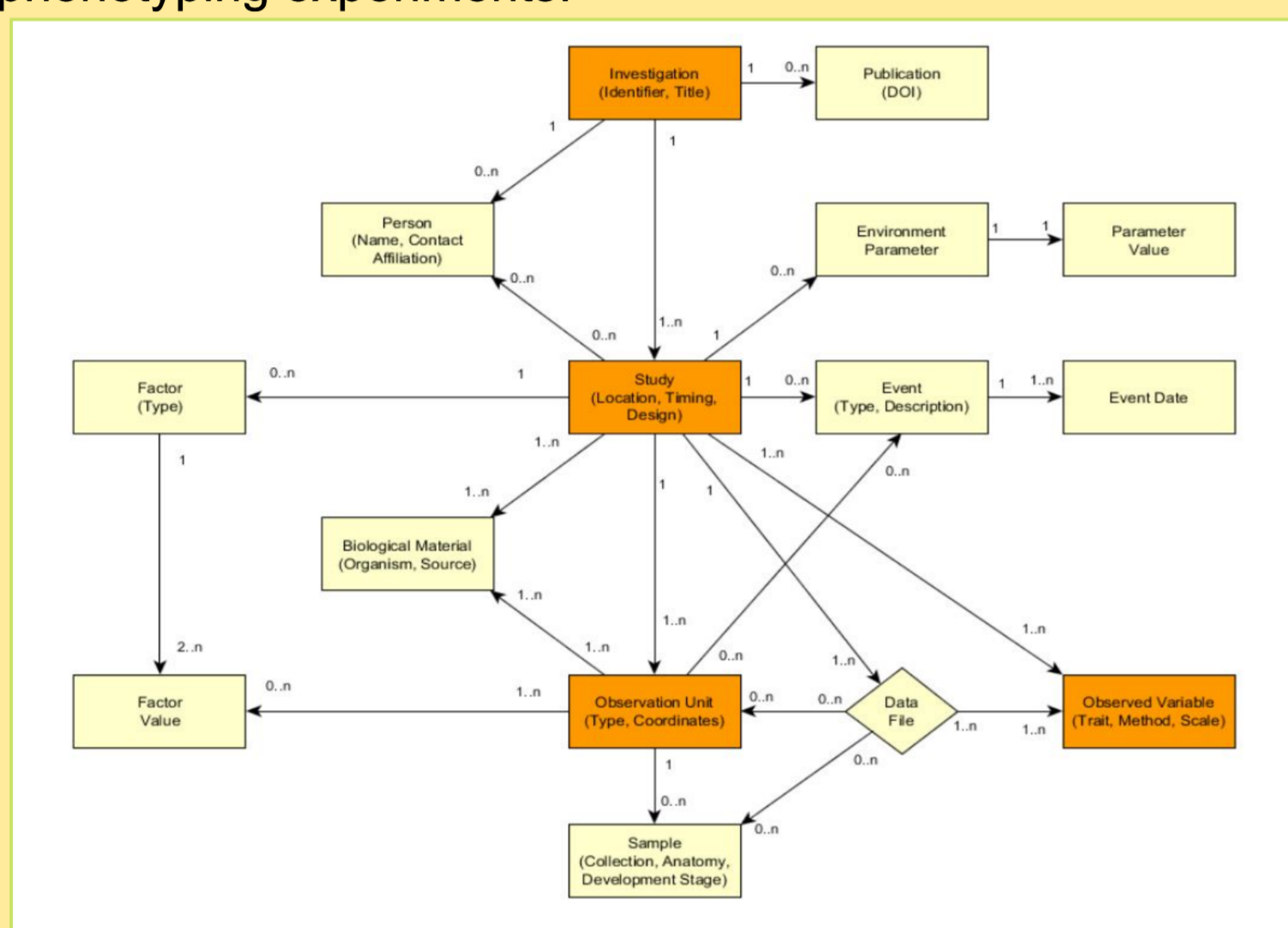
- Seagrasses are the only monocotyledonous flowering plants (angiosperms) which grow in marine environments. Seagrasses are found from shallow salty to brackish waters and inhabit environments from the tropics to the Arctic.
- With this web service we aim to develop the first database integrating, world-wide, seagrass trait data following community standards for metadata description and plant ontology definitions.
- The service currently supports the upload of 206 seagrass traits and associated metadata. Users are responsible for their data and access to their data (<http://seagrasses.ccmar.ualg.pt/>).

## Website



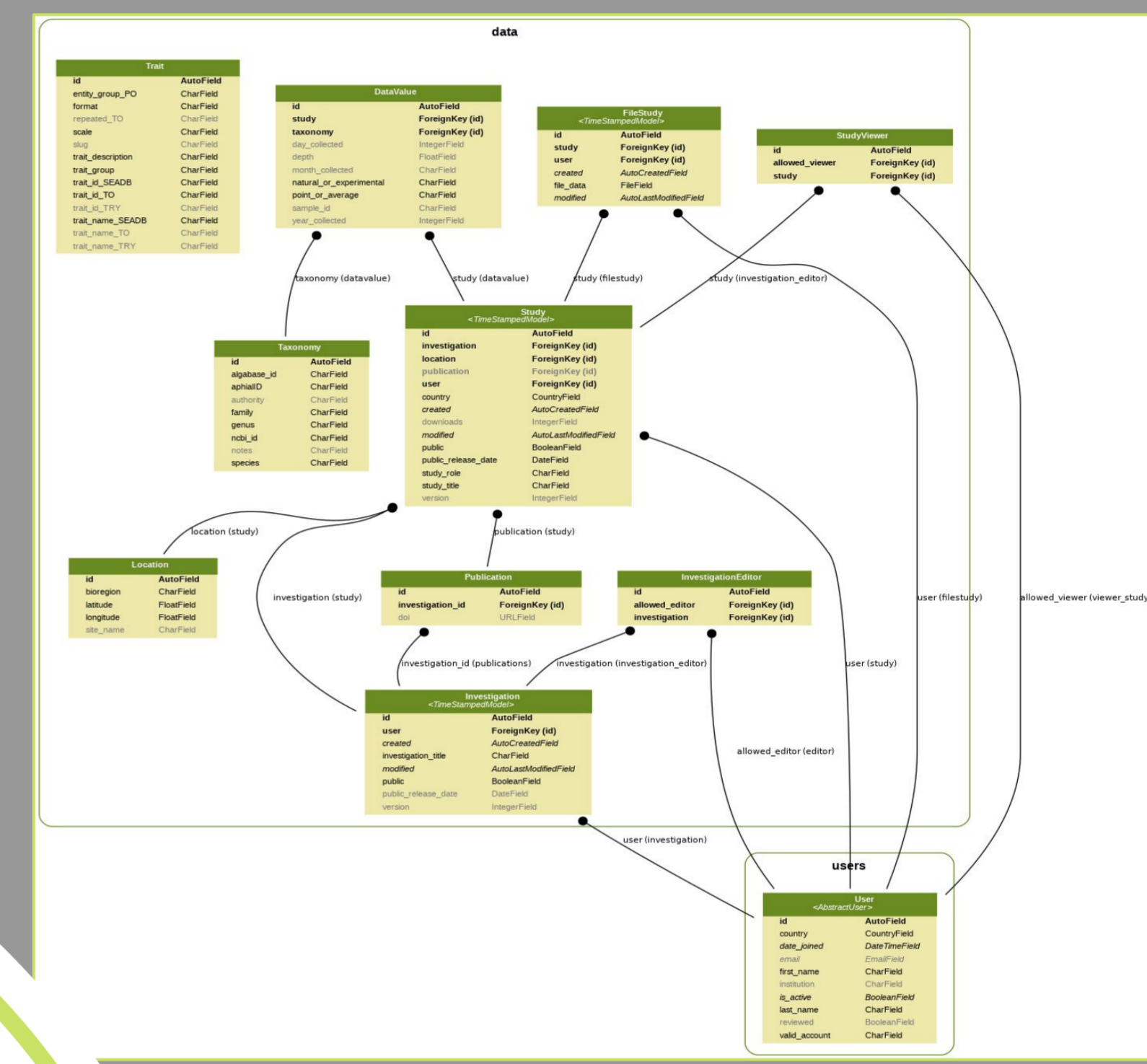
## MIAPPE compliant data

MIAPPE - "Minimal Information About a Plant Phenotyping Experiment", aim to harmonize data from plant phenotyping experiments. This standard includes a checklist and a data model of metadata required to adequately describe plant phenotyping experiments.



## Database schema

- Implemented database schema excluding traits columns of the table DataValue.



## FAIR Data

(F)indability, (A)ccessibility, (I)nteroperability, and (R)euse of digital assets.

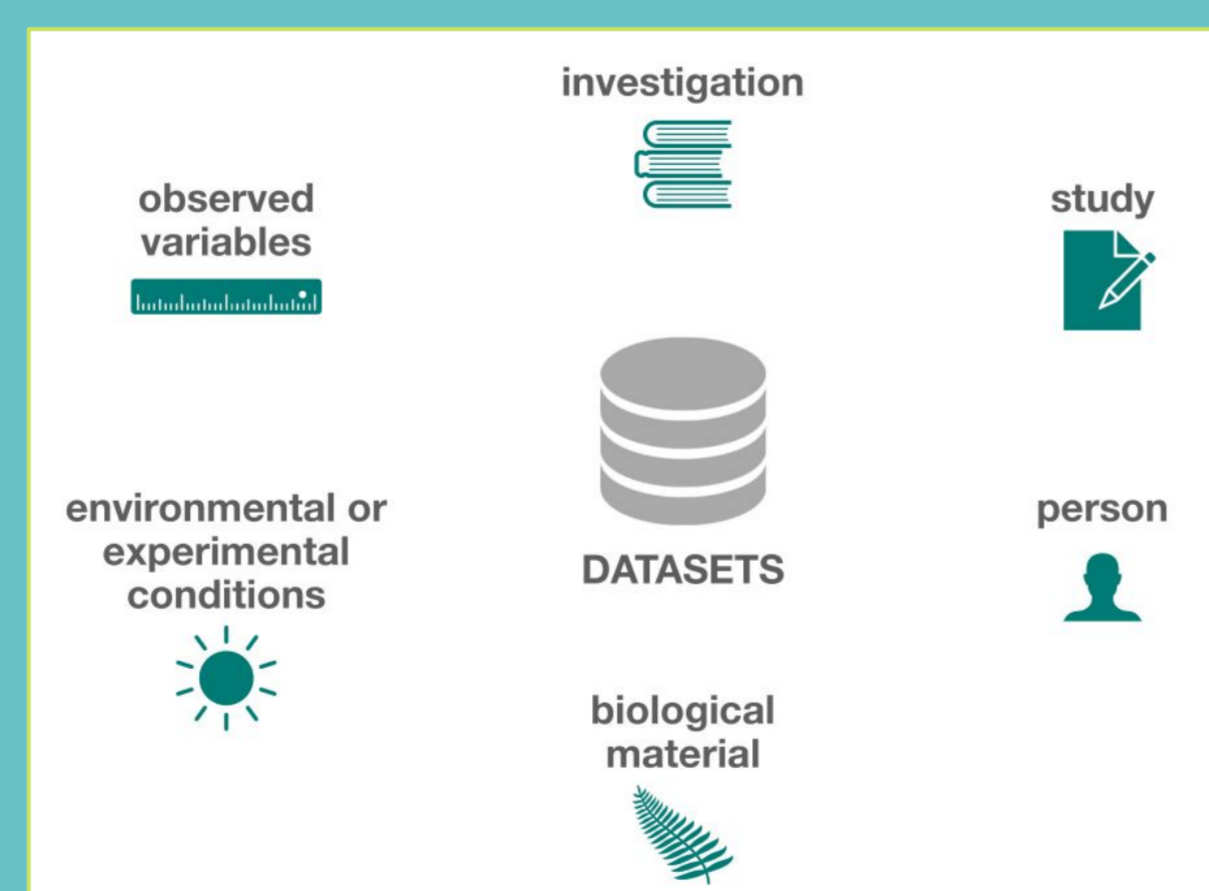
- Data sharing benefits scientific advancement by promoting transparency and encouraging collaboration, and this can accelerate research.

"ALL RESEARCH SHOULD AIM TO BE FAIR." #FIGSHAREFEST

	GOOD	BAD
<b>FINDABLE</b>	ONLINE DATABASE	FILED CABINET IN A BATH IN THE BASEMENT UNDER A LEAKING PIPE
<b>ACCESSIBLE</b>	OPEN ACCESS FOR EVERYONE (NO LOGIN)	THE FILING CABINET ALSO IS WIPED TO A REST OF WILD BRAGGERS
<b>INTEROPERABLE</b>	ALL DATA IS IN OPEN FORMATS	ALL DOCUMENTS ARE PRINTED IN COPIES, SAN AND WRITTEN IN ESPERANTO
<b>REUSEABLE</b>	GOOD META DATA AND SECURELY STORED FOR 10 YEARS	THE PAPER EXPLODES IF IT'S READ

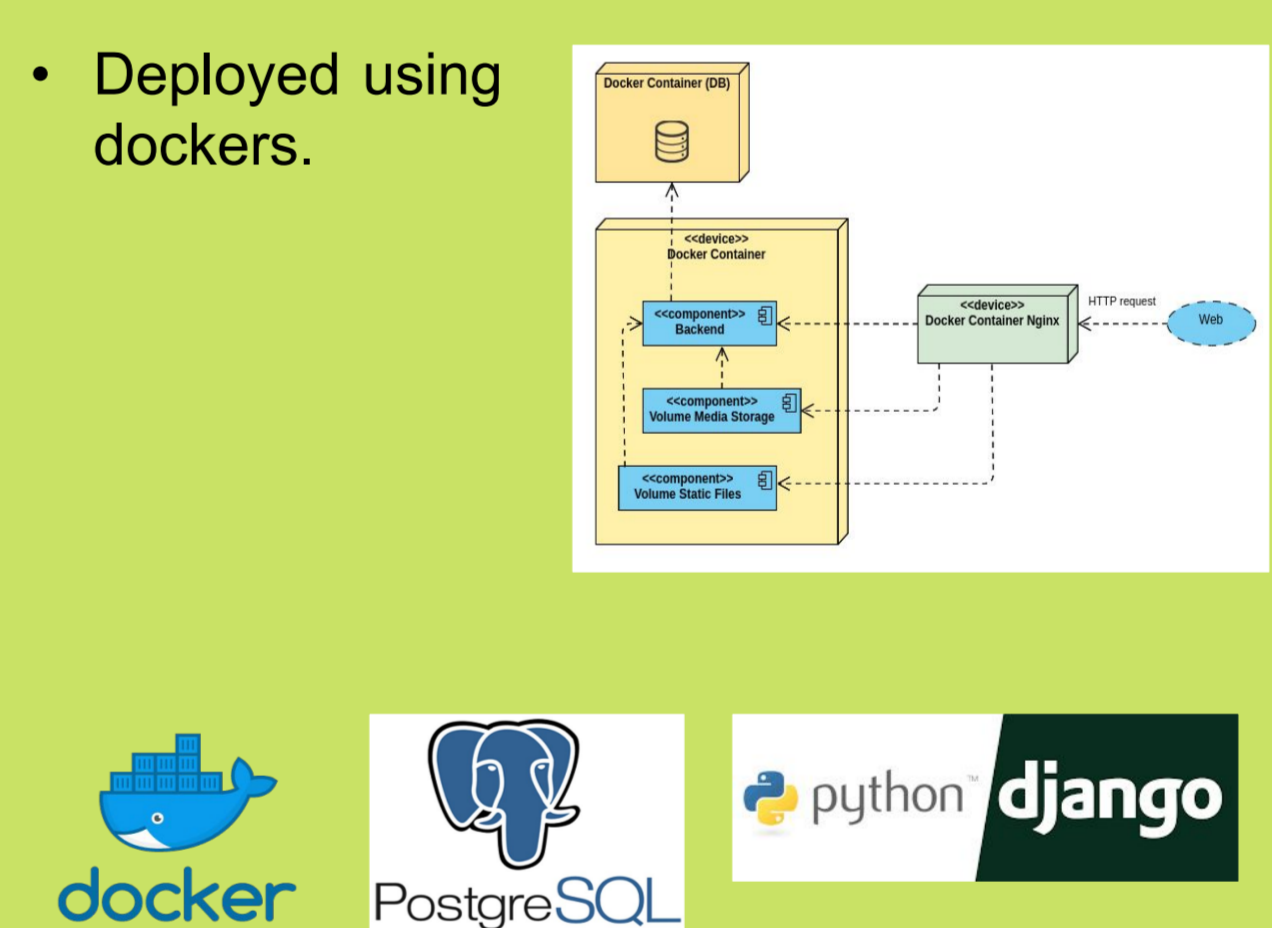
EMMANUELSCIENCE.COM

- Metadata play an important role in making data FAIR. It should be added continuously to your research data, not just at the beginning or at the end of a project, and also the correctness of the metadata make the data easier to be found.



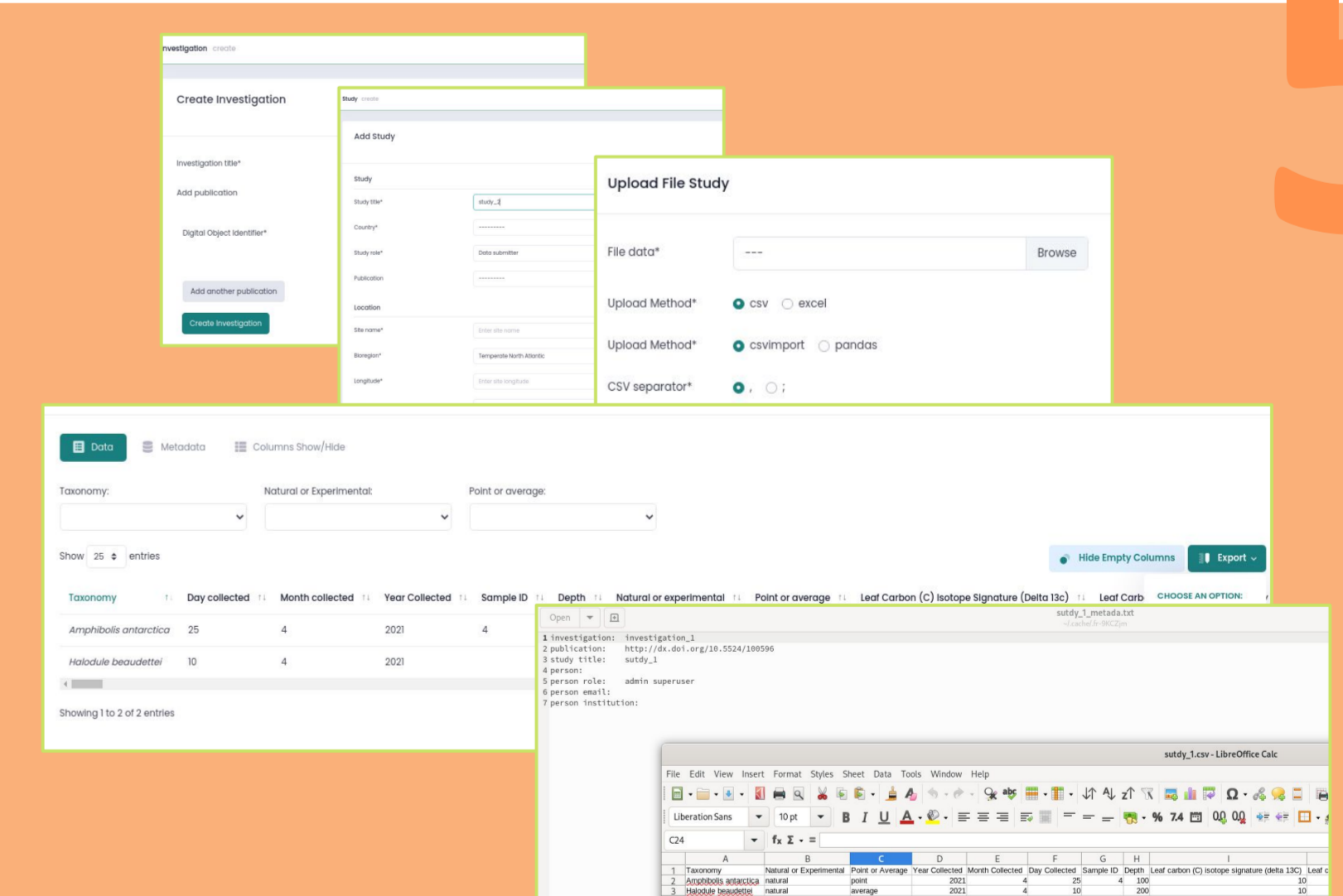
## Deployment

- Deployed using dockers.



## Implementation

- Data upload and the metadata associated.
- Data downloads include the metadata.



## Final Remarks

- All data in the A&A system is the responsibility of the submitting researcher, who has full control of access to their data. Moreover, all data that is made available is fully referenced to the original submitter (owning researcher). The quality of the data is however the responsibility of the owning researcher who submitted that data.
- SeagrassTraitDB will integrate a substantial amount of data on seagrass traits, which will be used to apply the Trait-based Ecology framework to advance the knowledge of seagrass ecosystems and their function, their response to climate changes, habitat restoration, and further evolutionary questions.

## Contacts

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