Creating an online overview of models developed within Copernicus

Core team: Oreane Edelenbosch, Stefanie Lutz & Moos Castelijn
Supporting: Gerbrand Koren, Kaj-Iver van der Wijst, who more?

Objectives ('Why?')
Whilst a lot of models have been develop at the Copernicus, a comprehensive overview of these is currently lacking. In order to mitigate this, an online overview will be developed. This has multiple advantages. First, it can facilitate logical and creative collaboration between different researchers, both within and outside of Copernicus. This speeds up scientific advancement in specific topics, and improves the position of Copernicus in the broader scientific community. Secondly, by having the models easily accessible they can more readily be used within education. This help students understand current modelling methods, and allows them to iterate further on the models that Copernicus has currently created.

Overview of Copernicus models ('What?')
As mentioned above, an overview of the utilized models will be developed. This consists of multiple things:
Dataverse overview: DataverseNL is the existing research data repository utilized by the UU, and many other researchers within the Netherlands and globally[1].
        Within Dataverse, all the utilized models and corresponding data will be stored in a dedicated Copernicus page. This will have both all models as a list users can scroll through and pick ones of interest, and a search function to find ones desired. Upon selecting a model, users are redirected to the Model page.

Model page:
Within every model page following will be present.
1. Name
2. Description
3. Who worked on the model including contact details.
4. And, if applicable:
    a. Link to a file containing model description
    b. Link to input data
    c. Link to model output data
    d. Data visualization link (as done for example in the hyde portal).
5. And, if feasible:
    a. Functionality to allow users to utilize the model themselves.

Copernicus overview:
On the Copernicus website, a more creative and illuminating overview will be given. Exactly how depends on the number of models contributing and on further discussions. Here, models can be selected which will bring you to the specific model page in the Dataverse.

Activities ('How?')

---

[1] https://www.uu.nl/en/research/research-data-management/tools-services/tools-for-storing-and-managing-data/data-repository-finder/the-research-data-repository-dataversenl

The first step is to gather who would like to partake in this project. This will be done through a **google form**. Here, respondents are asked questions regarding:
1. Do they have a model they want in the overview?
2. What type of data do they want to display?
3. Are they open for an interview on further collaboration?

The second step (executed in parallel with the first step) is developing some initial ideas regarding each of the three components: dataverse overview, model page & Copernicus overview.
This will be done through sketches of actual webpages in figma, and sketching relationships between components in tldraw.

The third step is to interview the interested survey respondents. This interview will contain three core components of the overview:
1. Ask them to deliver a description, the model and the data for the model page
2. Discuss how to visualize the data of this model
3. Discuss ideas regarding the Copernicus overview

Following the interviews participants are asked to deliver two things:
1. Questions regarding the model and the data
2. (Location of) Data (Or, asked to move data to a server?)

The fourth step requires that decisions are made. Firstly, the opinions of the interviewees and our own are weighted to decide on the format for the Copernicus overview. Secondly, which data types to show in what way is also decided.

The fifth step is to developed and populate the decided products and partaking models. This can be done in one of two ways, to be decided later on. Hardcoded vs automated.

The sixth step regards finalization. In this step, a showcase of the current pages will be held with participating models and other interested parties. Furthermore, the technical components of what has been done shall be documented, to allow others to change the created pages.

Time plan:

Activity	w 37	w 38	w 39	w 40	w 41	w 42	w 43	w 44	w 45	w 46	w 47	w 48	w 49	w 50	w 51	w 52
Project startup	■	■														
Orientation form		■	■	■												
Develop component ideas		■	■	■												
Interviews					■	■	■									
Decide on components								■								
Developing components			■	■	■	■	■	■	■	■	■	■	■	■	■	
Dev 1: Dataverse pages			■	■												
Dev 2: Copernicus overview					■	■	■	■	■	■						
Dev 3: Data visualization								■	■	■	■	■	■	■	■	
Finalization																■