

# OCK – OPEN CLIMATE KNOWLEDGE

100% open collaborative research for climate change knowledge / using data mining & open science publishing



## // MOTIVATION

The climate crisis of the predicted atmosphere temperatures rise to 1.5+ °C makes it imperative that research related to climate change be put to better use by being open and digitally connected.

We are concerned with making all aspects of research open, but as an example, less than 30% of research papers related to climate change are Open Access (Tai and Robinson 2018). This must change now!

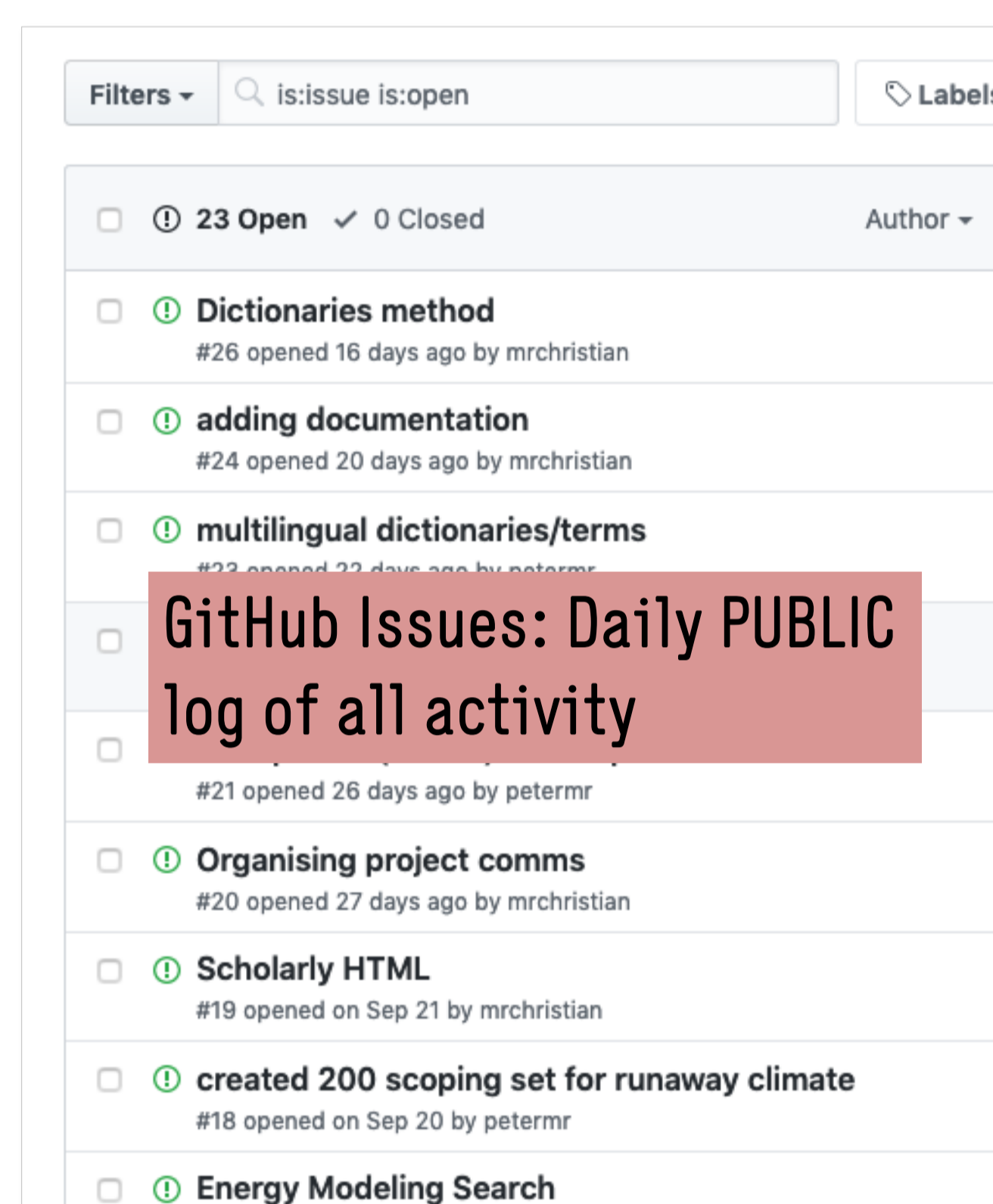
## // PROJECT ROADMAP

- Start OCK Working Group with Force11
- Use OpenNotebook data mining software to build open research stats and demonstrate Open Science Publishing features
- Develop plan for transitioning to 100% open
- Use cases: scholarly communications; academics, and; community science

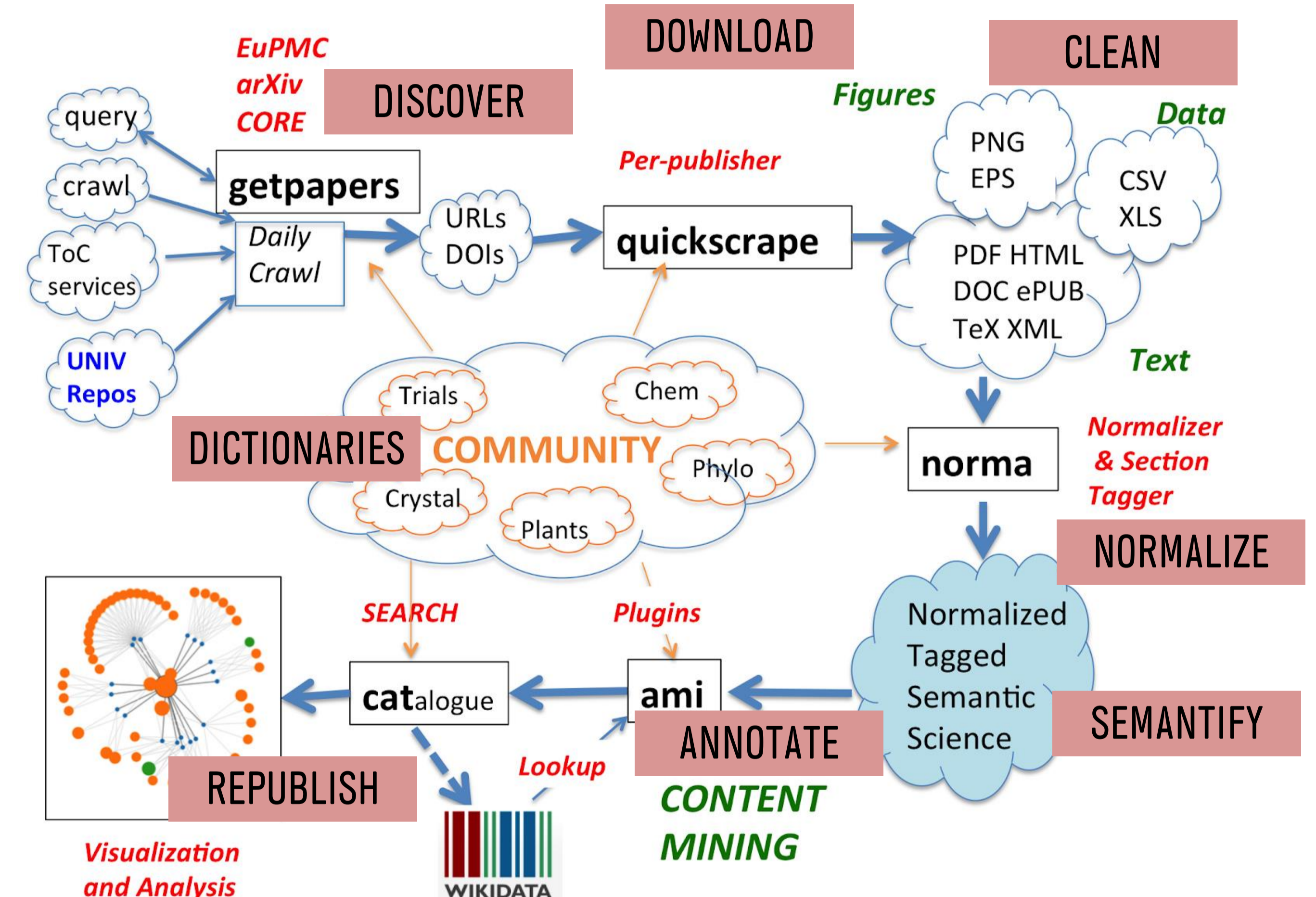
## 1. // DATA MINING

We have a powerful software OpenNotebook that can search open repositories using linked data dictionaries based on WikiData. We can then retrieve metadata and documents and apply analysis with Machine Learning, create collections and repositories, develop Knowledge Graphs, and more.

It's all open and you can use the tools as well.



## 2. // FUNCTIONALITY



## 3. // CONTENT MINING WITH DICTIONARIES

```
ami-search -p climate --dictionary
species country funders //builtin
dictionaries/climate.xml // bespoke
// dictionaries linked to Wikidata
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## 4. // THE PROBLEMS

CLOSED ACCESS / DISCOVERY – Few open tools / COPYRIGHT / Poor/no APIs / FORMATS – PDF, Word\* / SEPARATION of TEXT, DATA, IMAGES\* / DATA in IMAGES\* / No semantics, ontologies.

\*OpenNotebook software can help

## // FEEDBACK ZONE

### 1. // DATA MINING

### 2. // FUNCTIONALITY

### 3. // CONTENT MINING W/ DICTIONARIES

### 4. // THE PROBLEMS

### GENERAL

#OCK

Web: <https://github.com/OCKProject>

Twitter: @OCKProject

Poster DOI: 10.5281/zenodo.3608216

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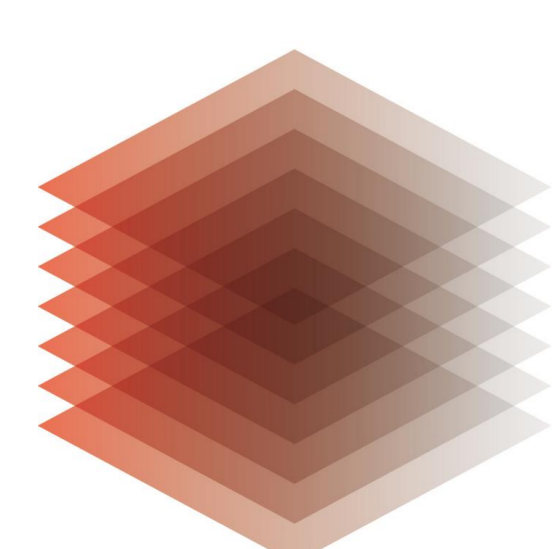
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