

# A PAGES Floods WG core project



## **WP1: Collecting, storing and sharing paleoflood data**

Albert-Ludwigs-Universität Freiburg

Michael Kahle <sup>1</sup>, Rüdiger Glaser <sup>1</sup>, Pierre Francus <sup>2</sup>, Pages Flood WG <sup>3</sup>

1: Physical Geography, University of Freiburg

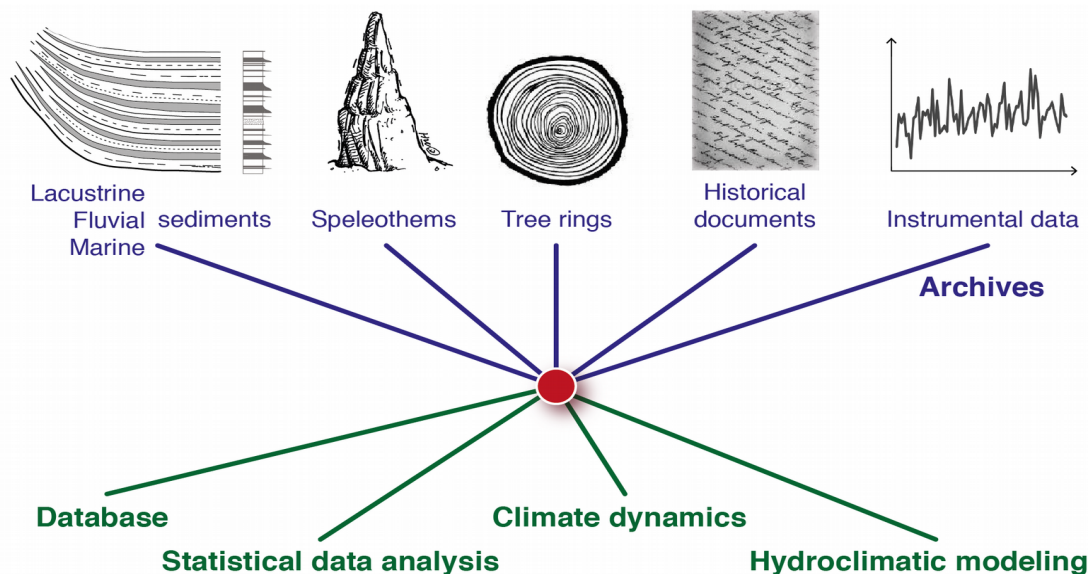
2: Institut National de la Recherche Scientifique

3: <http://www.pages-igbp.org/ini/wg/floods/people>

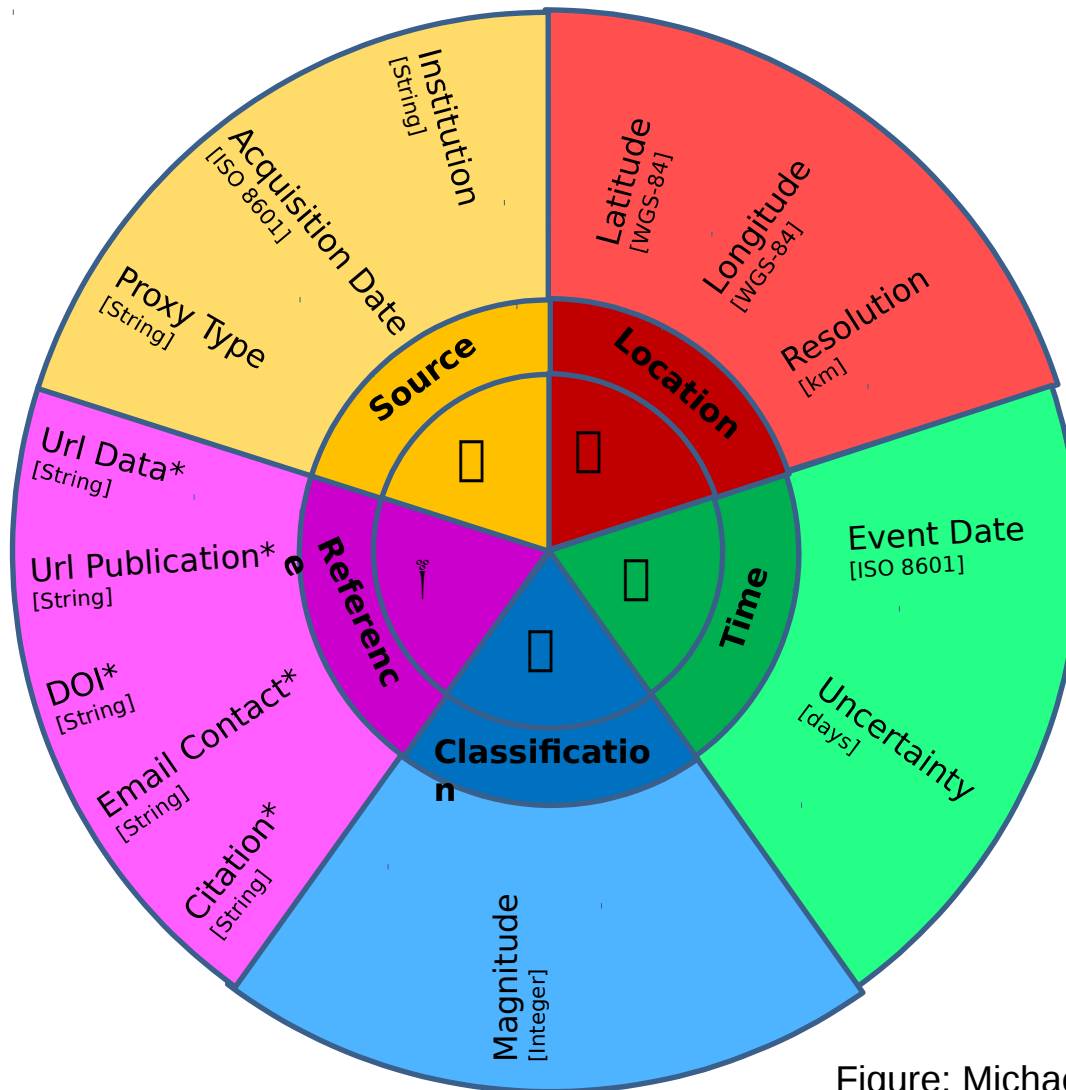
- From the Floods WG page:
- “Compile published data sets on floods for **open-access archiving** in order to facilitate the **visibility** of existing data and their **inter-comparison**”
- (<http://www.pages-igbp.org/ini/wg/floods/scientific-goals> -> iii)
- Necessary: Common Data Structure across Multiple Proxy Types
- If possible, use Sensor-Archive-Observation concept (Evans et al 2013 : <https://doi.org/10.1016/j.quascirev.2013.05.024>)
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- <http://pastglobalchanges.org/ini/wg/floods/wp1>

Everybody is welcome to contribute to the data pool:

- <http://pastglobalchanges.org/ini/wg/floods/wp1/data>
- More than 400 historical and paleoflood records worldwide.
- Different Proxy Types



# Minimal Data Structure

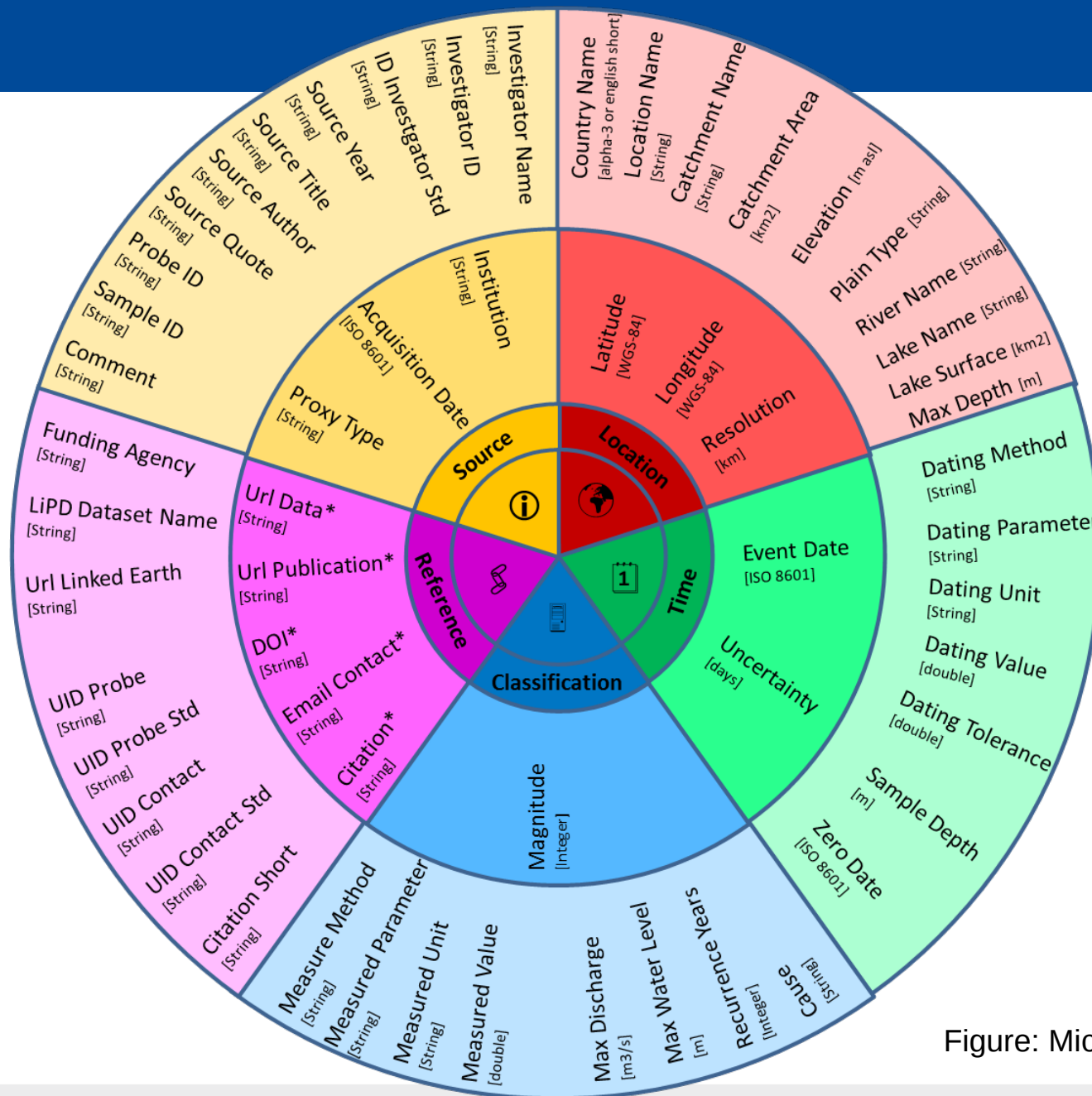


## Clusters

- : Source
- : Location
- : Time
- : Classification
- † : Reference

Figure: Michael Kahle 2017

# Common Data Structure



## Clusters

□ : Source

□ : Location

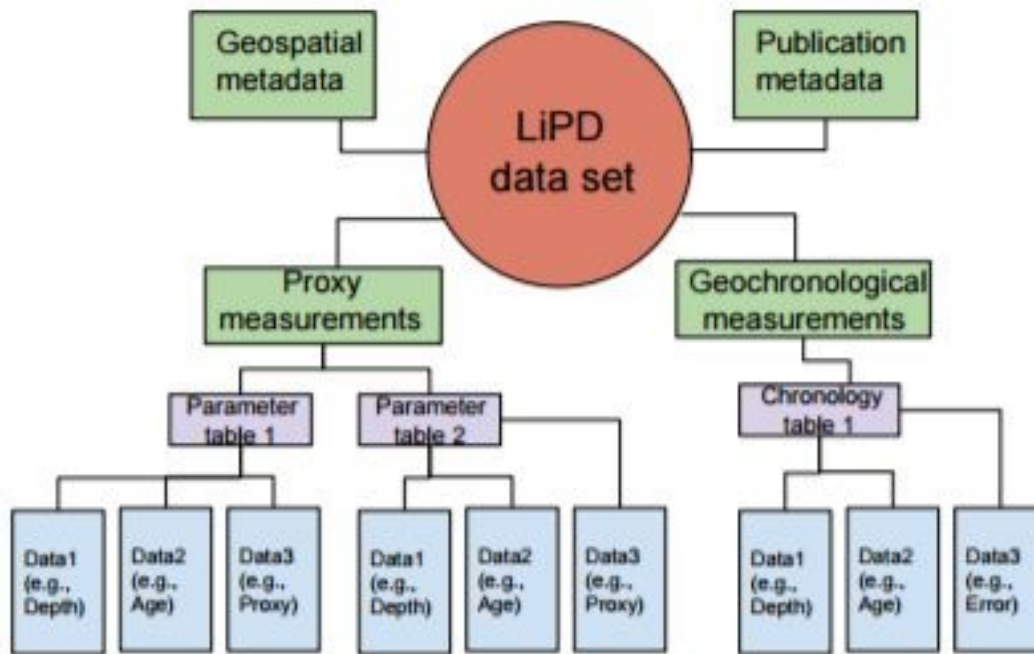
□ : Time

□ : Classification

🔗 : Reference

Figure: Michael Kahle 2017

Mixture of json and csv files in zip



## Advantage

- Covers: Sediments, Speleothems, Tree rings, Measurements on fixed points, ...
- Well established file format with tools available
- Fine structured

BUT - Enhancements needed for

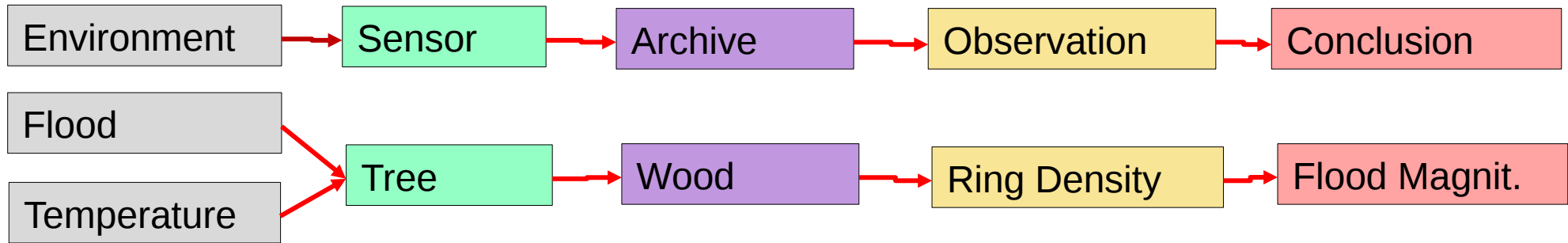
- Historical documents

<https://doi.org/10.5194/cp-12-1093-2016>

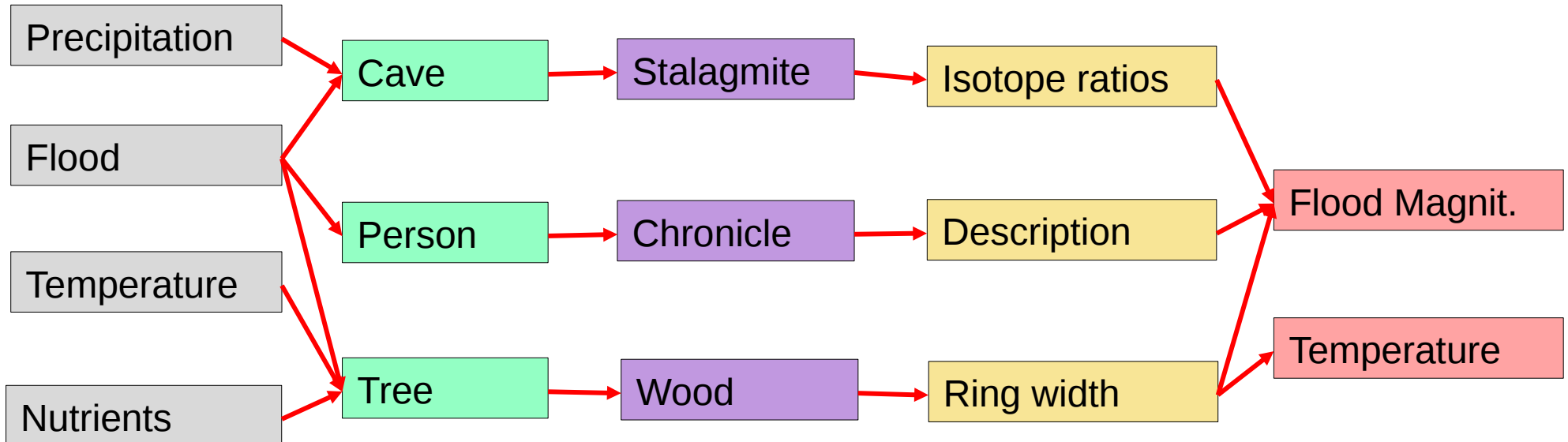
N. P. McKay and J. Emile-Geay

# Sensor, Archive, Observation

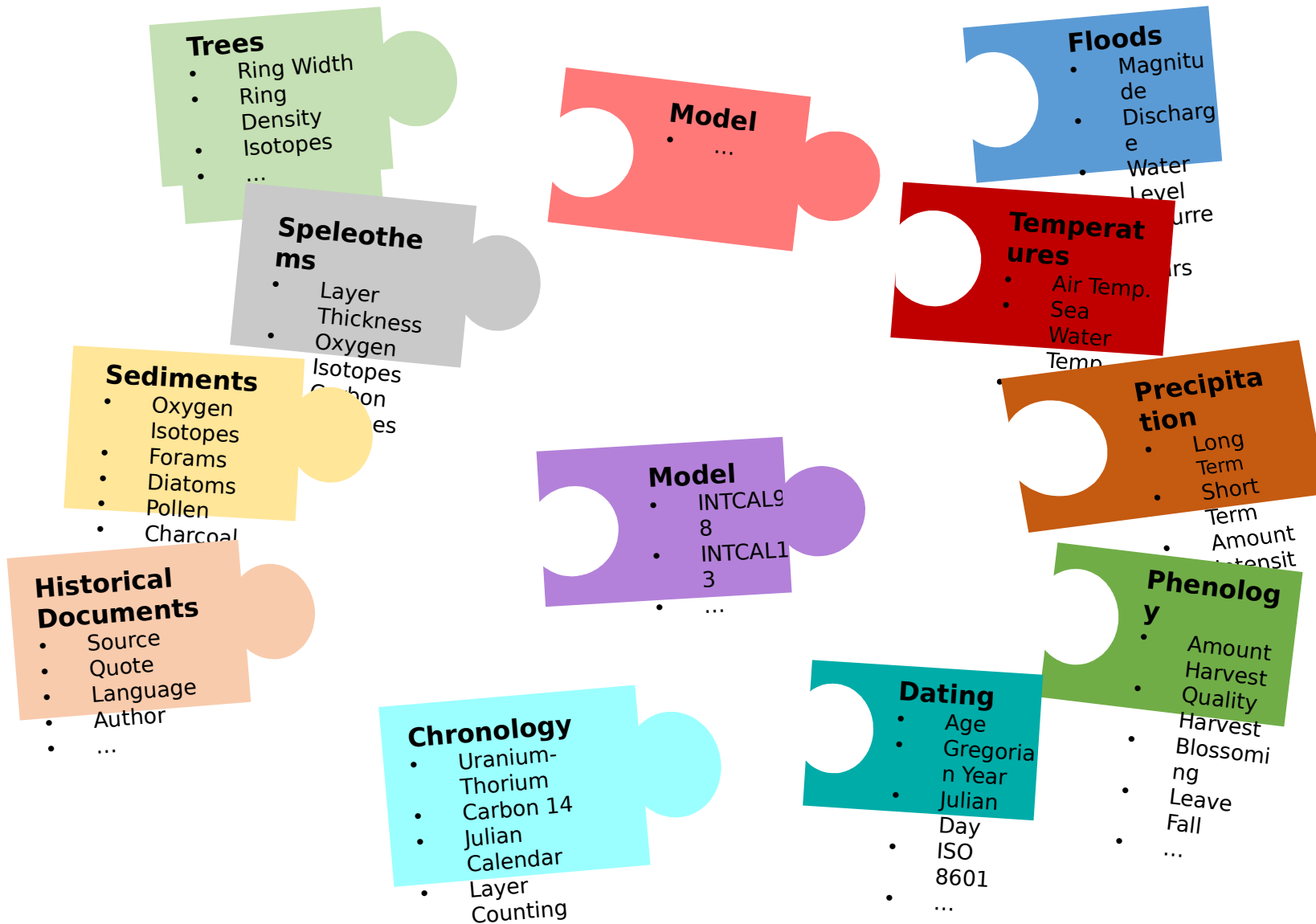
Single archive approach (by [Evans et al 2013](#)):



Multiple archive approach:



# Proxy/Sensor in LiPD





# Definition of LiPD Flood Format



Enhance LiPD format to store inferred flood data in a common way

([http://wiki.linked.earth/Category:Floods\\_Working\\_Group](http://wiki.linked.earth/Category:Floods_Working_Group))

Enhance LiPD format to store observations from historical document archives

([http://wiki.linked.earth/Category:Historical\\_Documents\\_Working\\_Group](http://wiki.linked.earth/Category:Historical_Documents_Working_Group))

All FWG members are invited to join the WG on Linked Earth and add feedback and/or comments there

([http://wiki.linked.earth/Category:Floods\\_Working\\_Group](http://wiki.linked.earth/Category:Floods_Working_Group))

# Next steps



Compile short example files (5-10 events) for each proxy type and provide it to the community

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- **Your help is needed:** If you send me some example data, I can convert it to LiPD-format and upload it to the LiPD Wiki. Email: [michael.kahle@geographie.uni-freiburg.de](mailto:michael.kahle@geographie.uni-freiburg.de)
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- Later, LiPD tools will be available to convert/enter your data by yourself.



Thank you