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## ENVRI-FAIR provenance: AnaEE use case

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# ENVRI-FAIR provenance



Amélie Fiocca et Christian Pichot

**INRAE**

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# AnaEE sites = 'platforms' for experimentation on ecosystems

- In vitro**



- Analytical**



Managing data/metada for:

- discovery
- access to resources : platforms, datasets...

**Including PROVENANCE!**



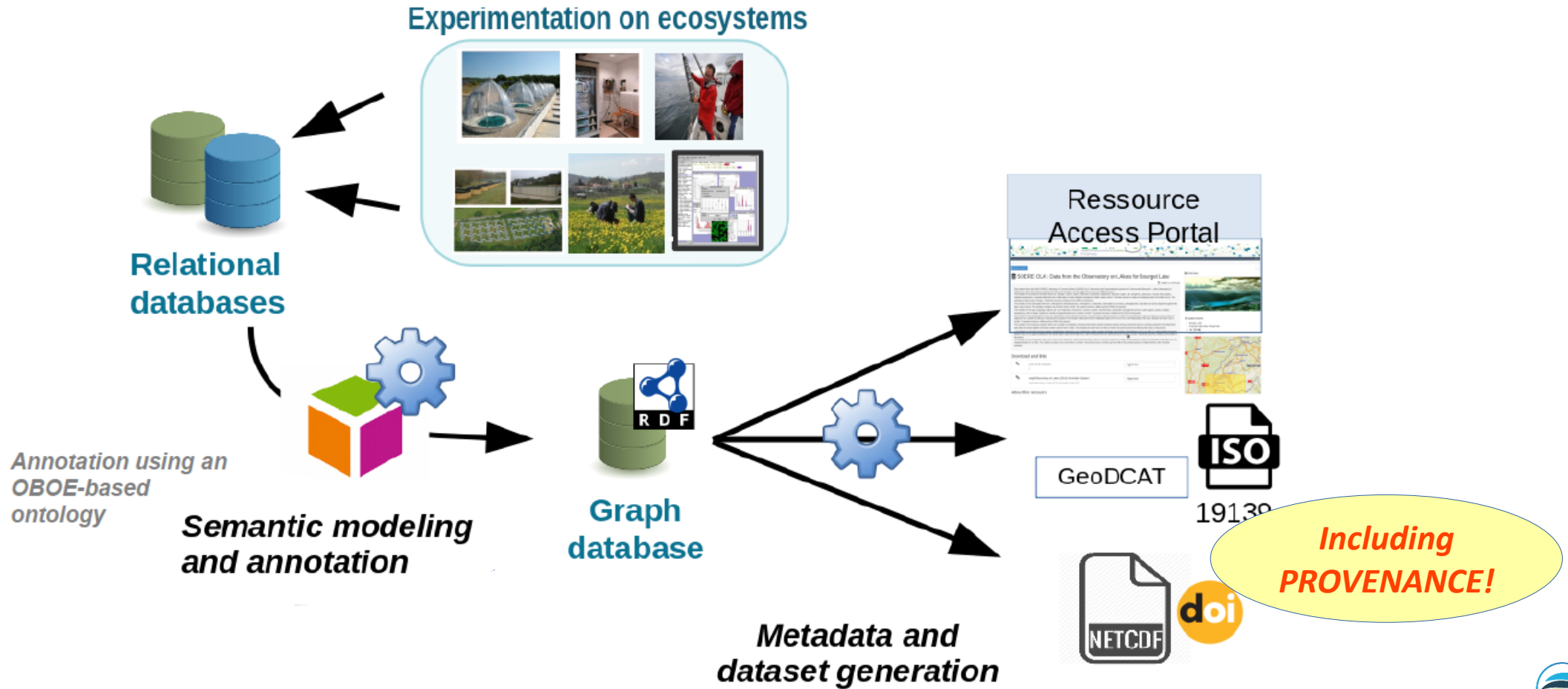
- Data & modelling**

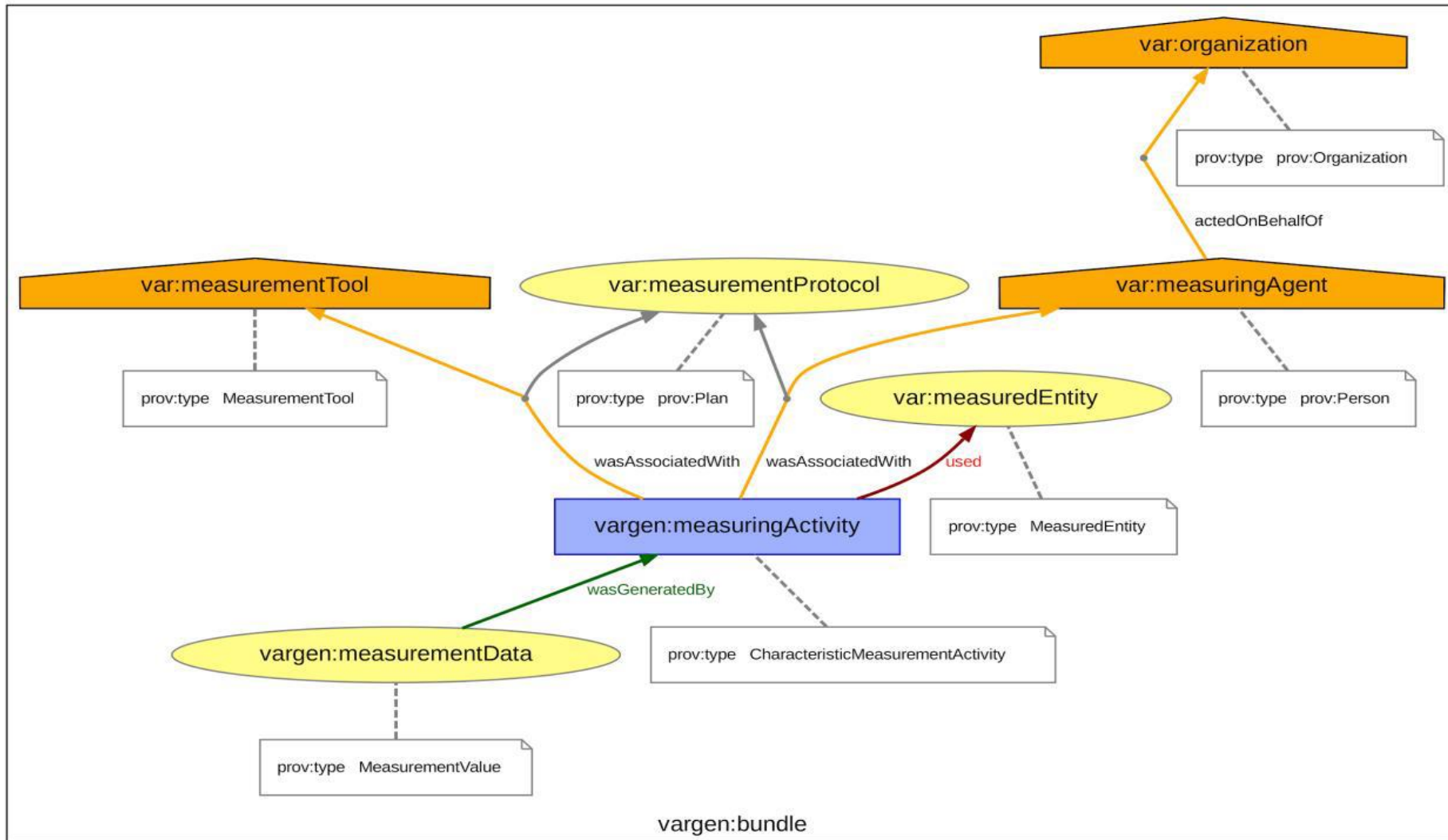
AnaEE provenance use case





# AnaEE workflows





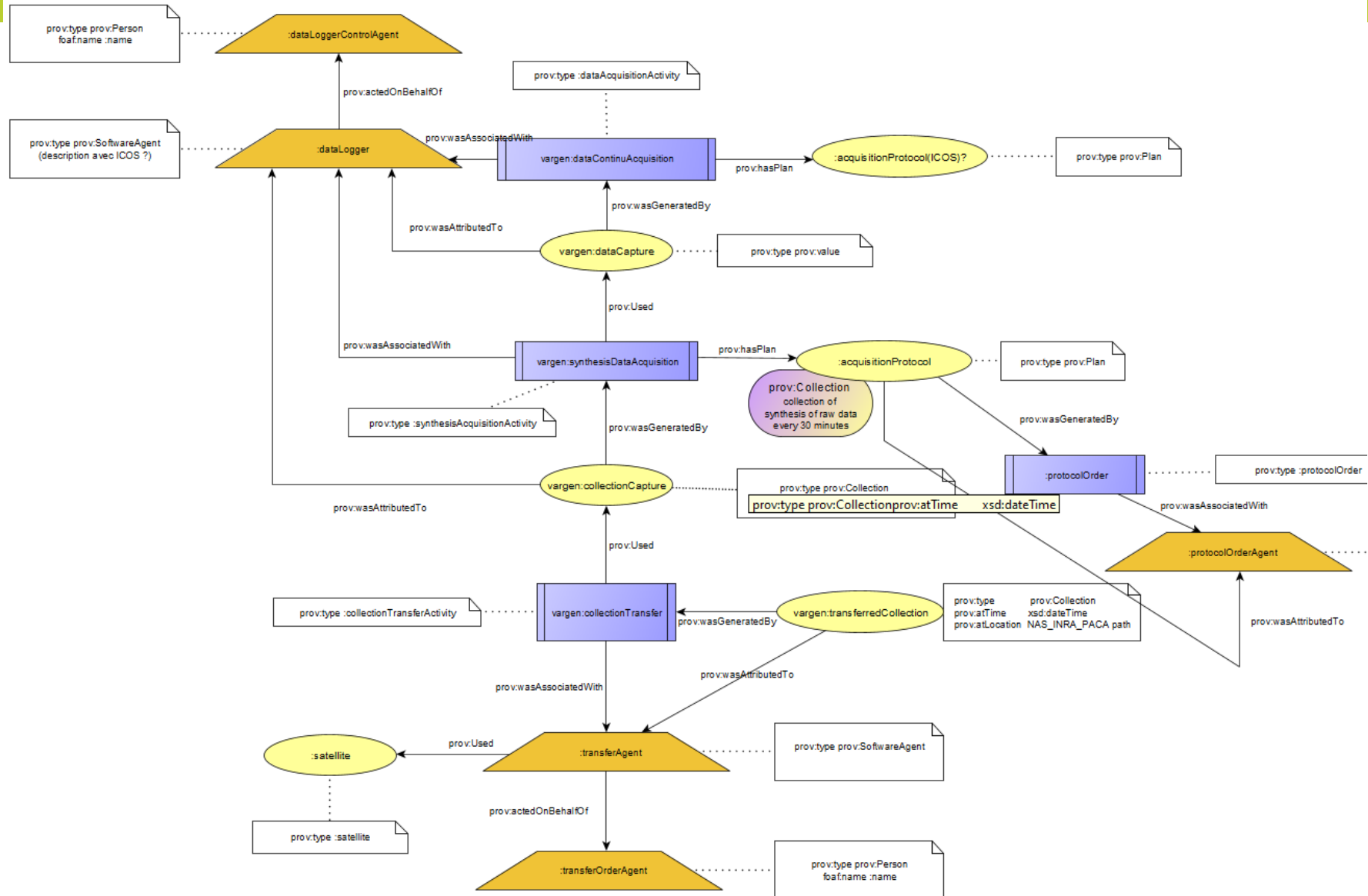


# Objective and methodology

- Our objective :
  - Provide provenance informations for datas and metadatas users
  - Generate automatically this provenance informations as metadata for datasets
- Methodology :
  - Provenance element identification and flow modeling
  - Test provenance demonstrator with Jupyter Notebook
  - Provenance implementation test with AnaEE semantic pipelines and generation of rdf triples

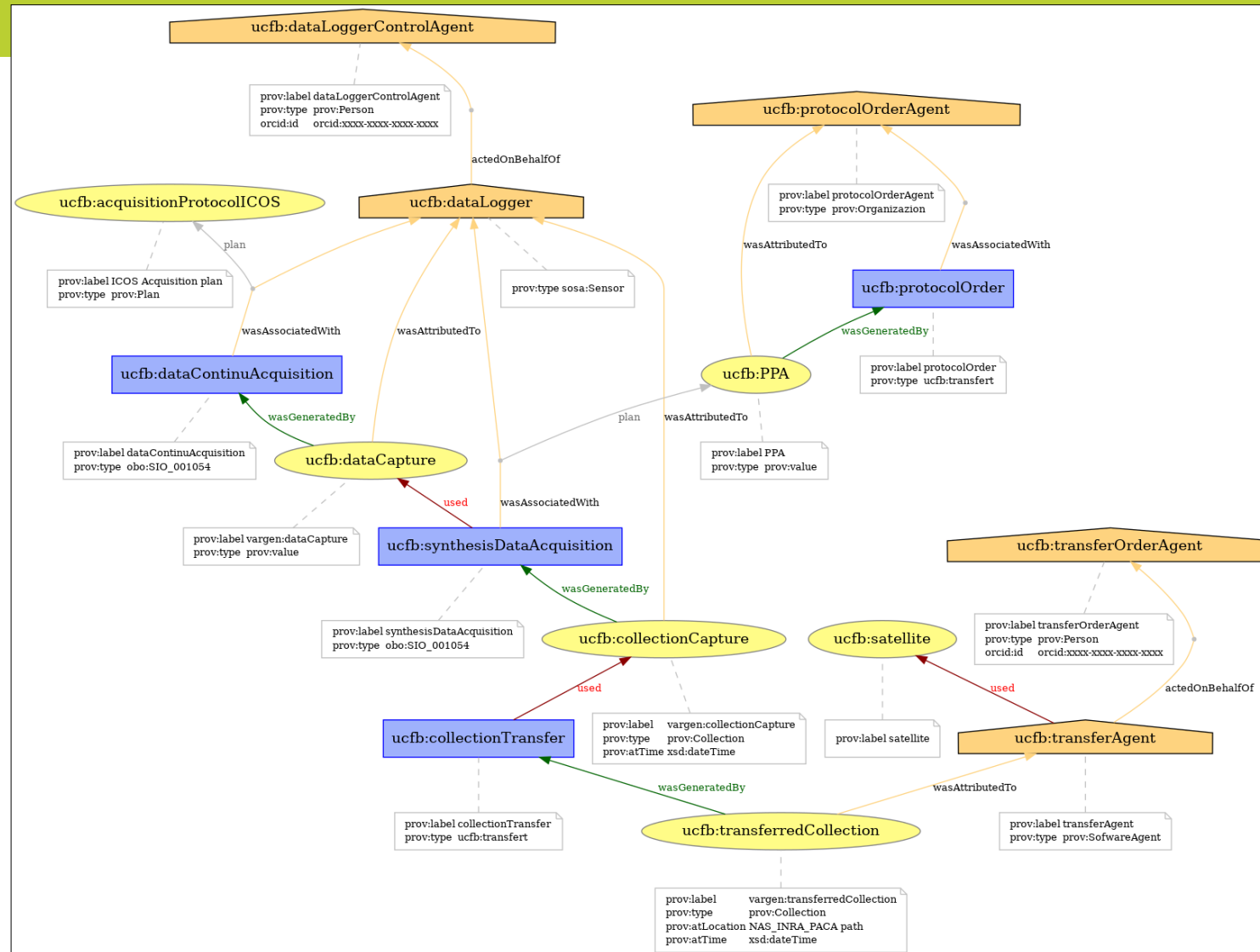


# Flux modelisation «Font-Blanche» use case





# Provenance demonstrator with Jupyter Notebook



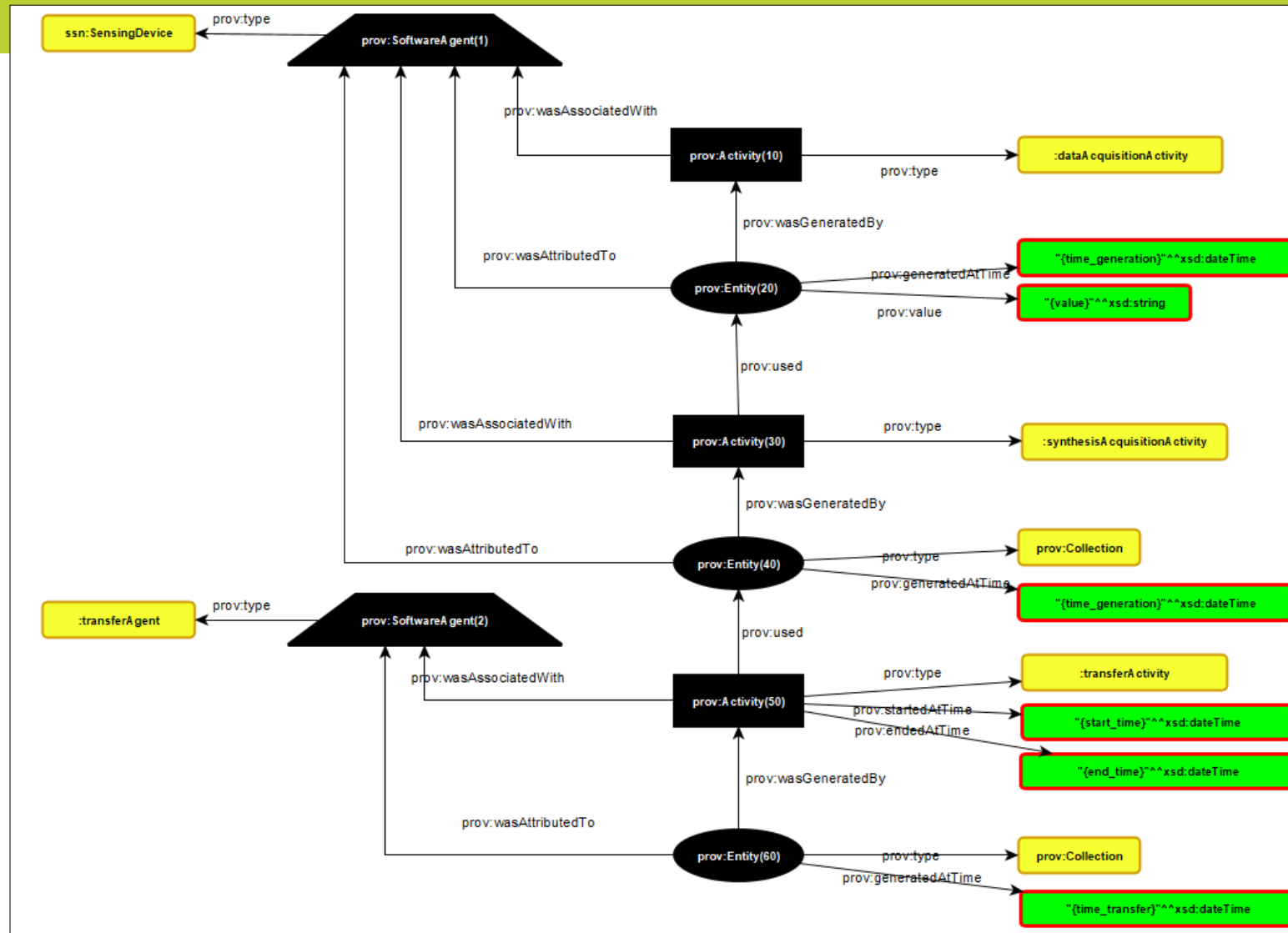
AnaEE provenance use case





# Provenance implementation with AnaEE semantic pipelines

Graph syntax compliant with existing pipelines



AnaEE provenance use case



# Generation of triples for Provenance

```
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<http://semanticscience.org/resource/SIO_001054> <http://www.w3.org/ns/prov#wasAssociatedWith> <http://prov_agent/FontBlancheDataLogger1/3> .
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```



# State of advancement and issues

- Identification of really useful provenance elements for dataset users
- Evaluation of current provenance elements availability or the possibility of making them available in AnaEE platforms
- Provenance instantiation (=>rdf triples)



# Identification of really useful provenance elements for dataset users (correspondance with D8.6 specifications)

## Acquisition

- **Measuring instrument (AnaEE-R5)**
  - Name
  - Type
  - Brand
  - Model
  - Installation date
  - Installation protocole
  - Production date
  - Calibration informations
  - PIDINST / B2INST ...
- **Acquisition method**
  - Text description
- **Acquisition context (AnaEE-R4)**
  - Date
  - Position
- **Technical responsible (AnaEE-R6)**
  - Name
  - Contact
  - Orchid ID
- **Scientific responsible (AnaEE-R6)**
  - Name
  - Contact
  - Orchid ID
- **Project description**
  - Text description

## Curation

- **Curation agent (AnaEE-R7)**
  - Name
  - Type
  - Author -> name, contact, Orchid ID
  - (Repository link)
- **Responsible for data curation (AnaEE-R6)**
  - Name
  - Contact
  - Orchid ID

## Annotation / Production

- **Annotation / Production agent (AnaEE-R8-10)**
  - Name
  - Type
  - Author -> name, contact, Orchid ID
  - (Repository link)
- **Responsible for annotation / production (AnaEE-R6)**
  - Name
  - Contact
  - Orchid ID

## Publication

- **Publication agent (AnaEE-R10)**
  - Name
  - Type
  - Author -> name, contact, Orchid ID
  - (Repository link)
- **Responsible for data Publication (AnaEE-R6)**
  - Name
  - Contact
  - Orchid ID