



## SELFIE – SHOW AND TELL

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2019-05-28

# PREVIOUS WORK IN ELFIE

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- Use Cases
  - Groundwater Information Network : groundwater monitoring
  - Surface – Ground water connexion
  - Hand-crafted JSON-LD files
  - Home brewed resolver on top of our URI pattern
- BLiV
  - ELFIE demos
  - [Surface-ground water networks interaction Demo](#)
  - [Ground water monitoring Demo](#)
- QGIS linked data
  - [QGIS GMLAS Toolbox](#)

# SELFIE FROM DIFFERENT VIEWPOINT

Must have

- Semantic

- OGC UML -> ontologies +1: follow-up on ELFIE tests
- starting a schema.org group from ELFIEs ?
  - See what's done for example : [automotive \(gao\)](#),  
<https://bioschemas.org/specifications/Taxon/>
  - geoscience/environmental : picking terms from O&M, GSML,  
GWML, HY\_Features

- URI

- Pattern (ex : no /info/ nor /data for data.geoscience.fr), just /id/ (and /def/ and /ncl/ and /api/)
- Resource model : (this feature linked to this one, this representation available) like NR-Can
- Resolving mechanism : Conneg revised (DXWG), Resolver technology (ours is home-cooked so far)
- Knowing what's available behind a URI (HTTP Option KO, Matrix available according to the ressource model, other ?): how to retrieve this and how will it be structured ?

# SELFIE FROM DIFFERENT VIEWPOINT

Must have

- OGC APIs
  - WFS3
    - Geoserver / JSON-LD : on-going, [draft available here](#)
    - Semantic extension to the spec
  - ST API / JSON-LD : have a draft JSON-LD response to be proposed to the STApi SWG
  - URIs in OGC services
    - getFeature by ?URI? ;)
    - REST Apis where you filter by URI : lots of URL encode ...
- (future generation) Client side (hard to choose one)
  - QGIS GMLAS toolbox : enhance
  - BLiV : enhance
  - Jupyter notebook : Test QGIS GMLAS & BLiV spirit in

# SELFIE FROM DIFFERENT VIEWPOINT

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Must have

- Crawlers

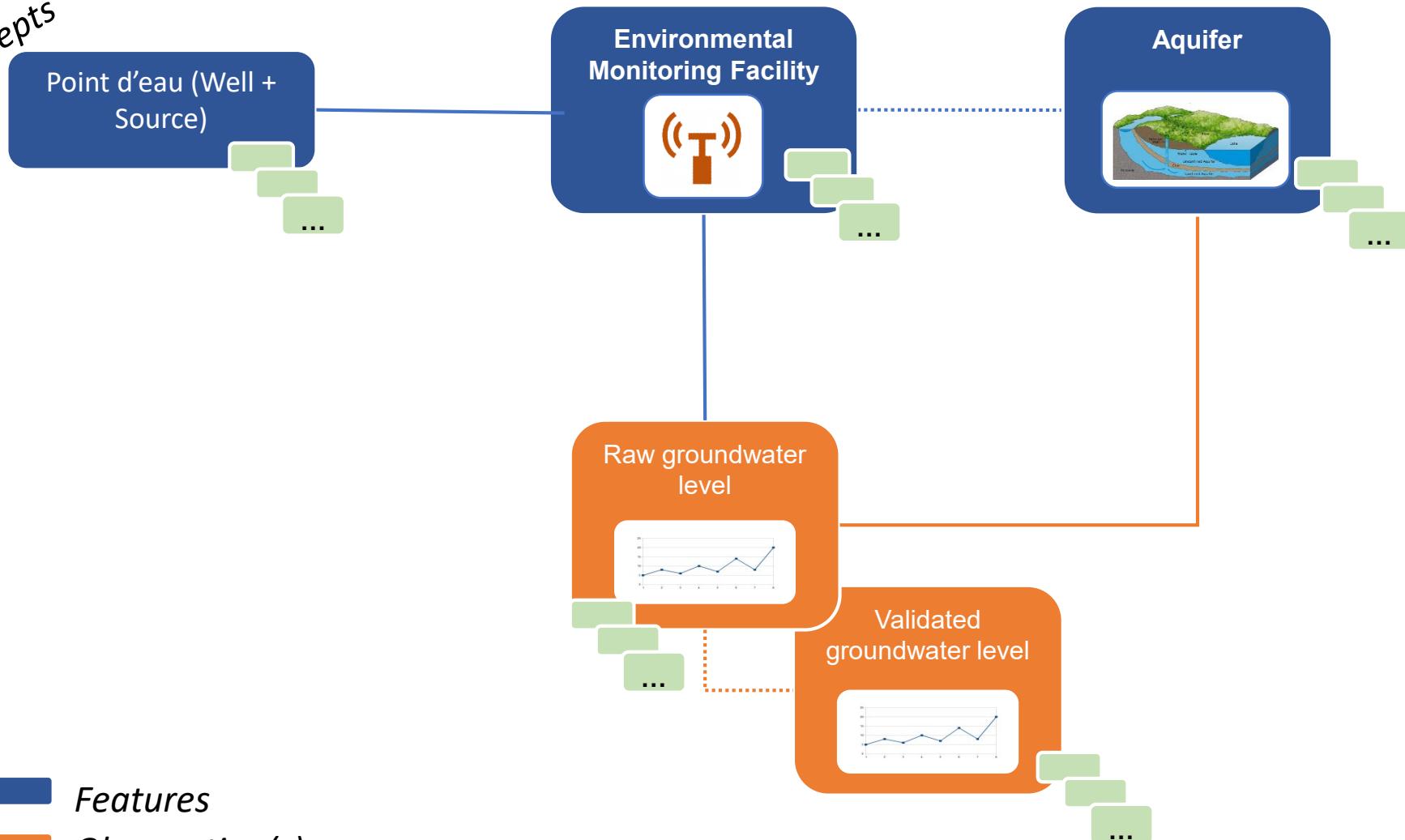
- Monitor, refine JSON-LD and associated vocab to enhance indexing
- Is adding our ontologies enhancing indexing ?

- JSON-LD

- Metadata : JSON-LD : schema.org + DCAT on metadata
- Connect with search engines folks !

# USE CASE 1: GROUNDWATER INFORMATION NETWORK

Concepts



■ Features

■ Observation(s)

■ Register(s)

# USE CASE 1: GROUNDWATER INFORMATION NETWORK

Interoperable  
Semantics

Point d'eau (Well +  
Source)  
EPOS  
Borehole

Environmental  
Monitoring Facility

INSPIRE EF

Aquifer

OGC  
GWML2

Raw groundwater  
level

WaterML2  
& ST API

Validated  
groundwater level



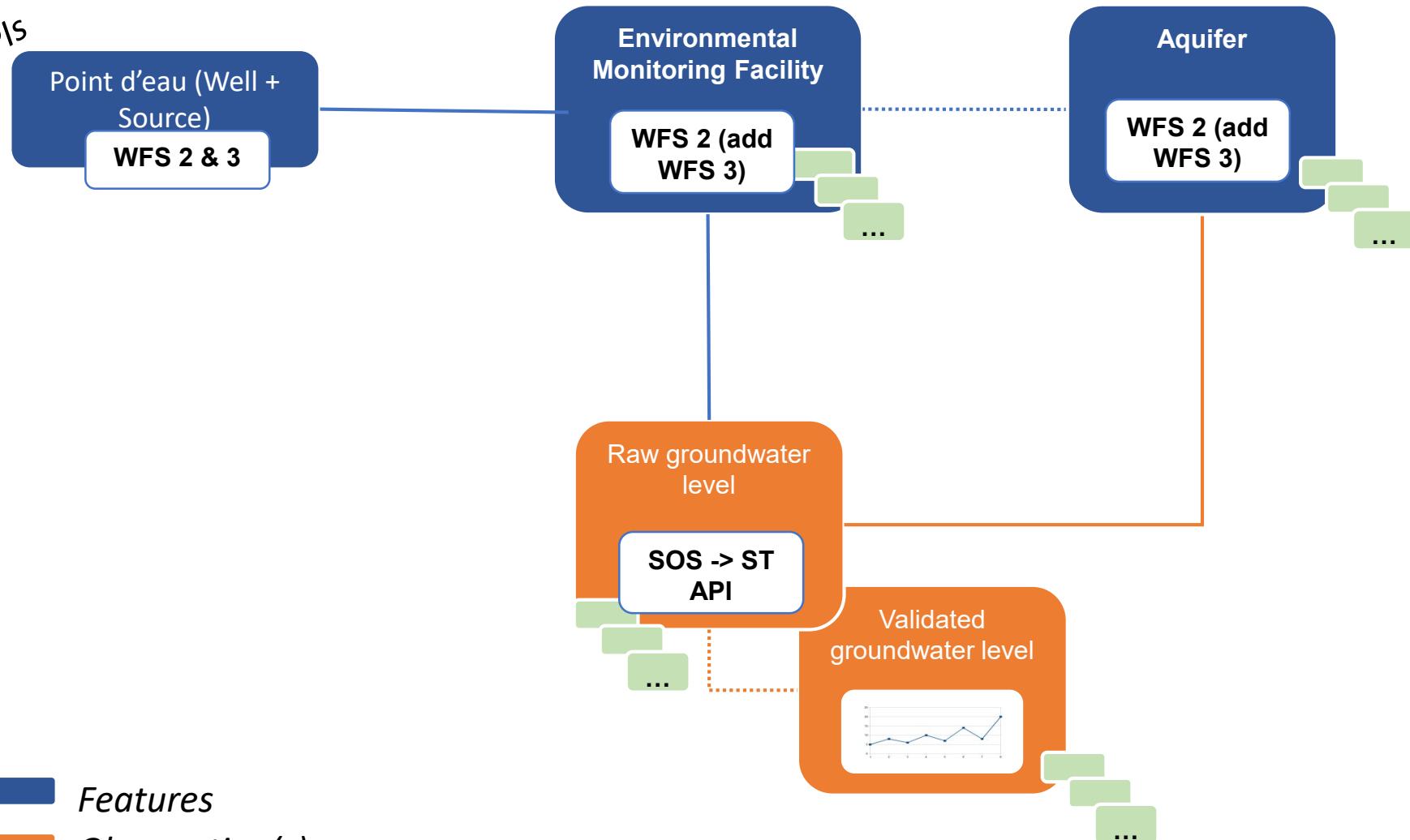
■ Features

■ Observation(s)

■ Register(s)

# USE CASE 1: GROUNDWATER INFORMATION NETWORK

APIs

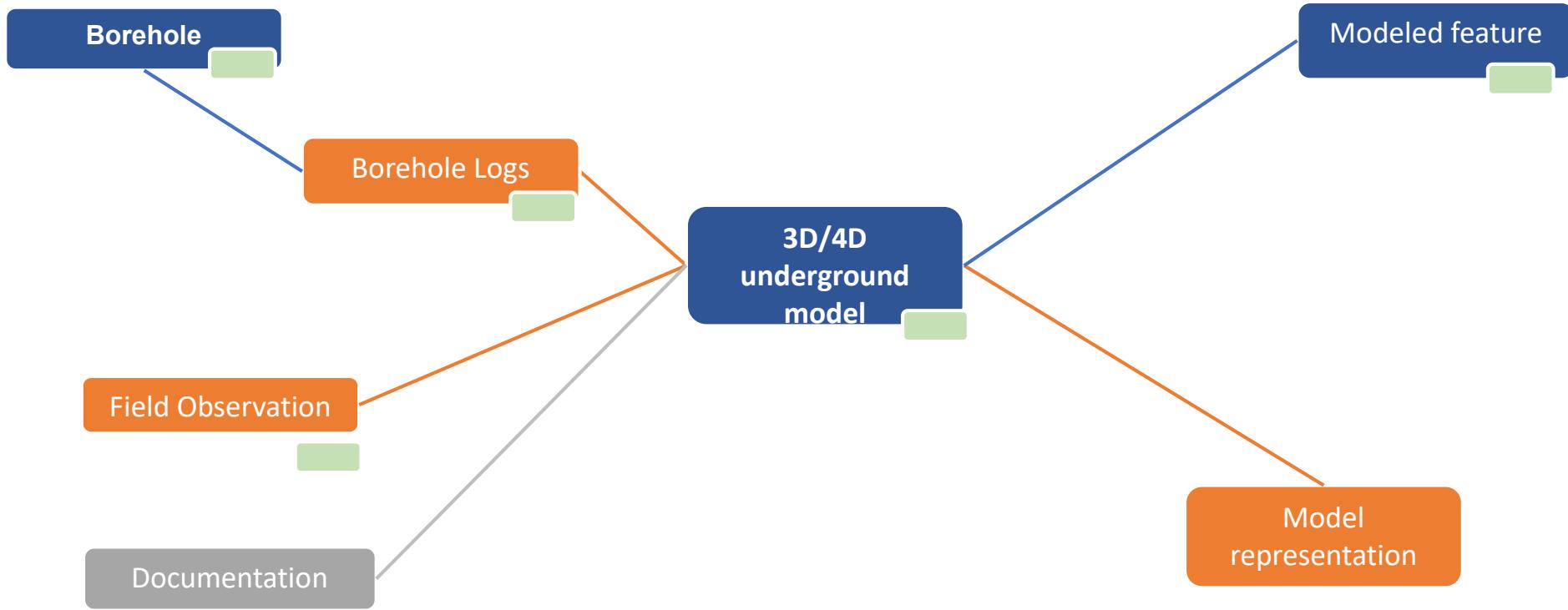


■ *Features*

■ *Observation(s)*

■ *Register(s)*

## USE CASE 2: GEOLOGIC MODEL



■ *Features*

■ *Observation(s)*

■ *Register(s)*

THANK YOU



a.feliachi@brgm.fr  
s.grellet@brgm.fr

