



Base de données des capteurs
du Parc national des Écrins

CONTEXTE :

- Augmentation du nombre de mesures physiques depuis 2000
- Matériel et capteurs divers et de plus en plus nombreux
- Multiplication des données hétérogènes
- Beaucoup de données, pas de base de données

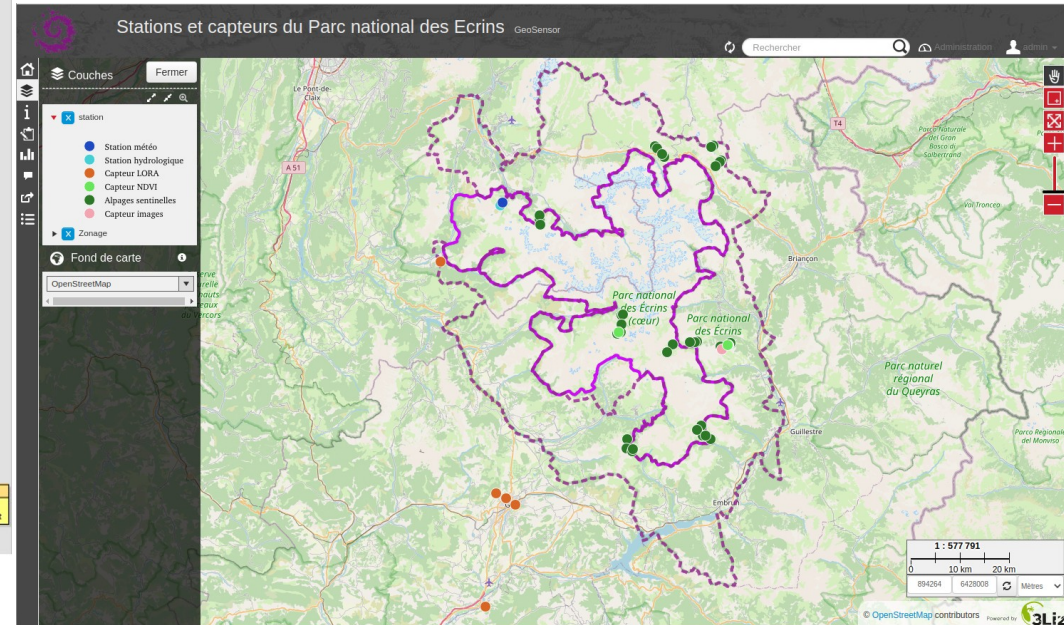
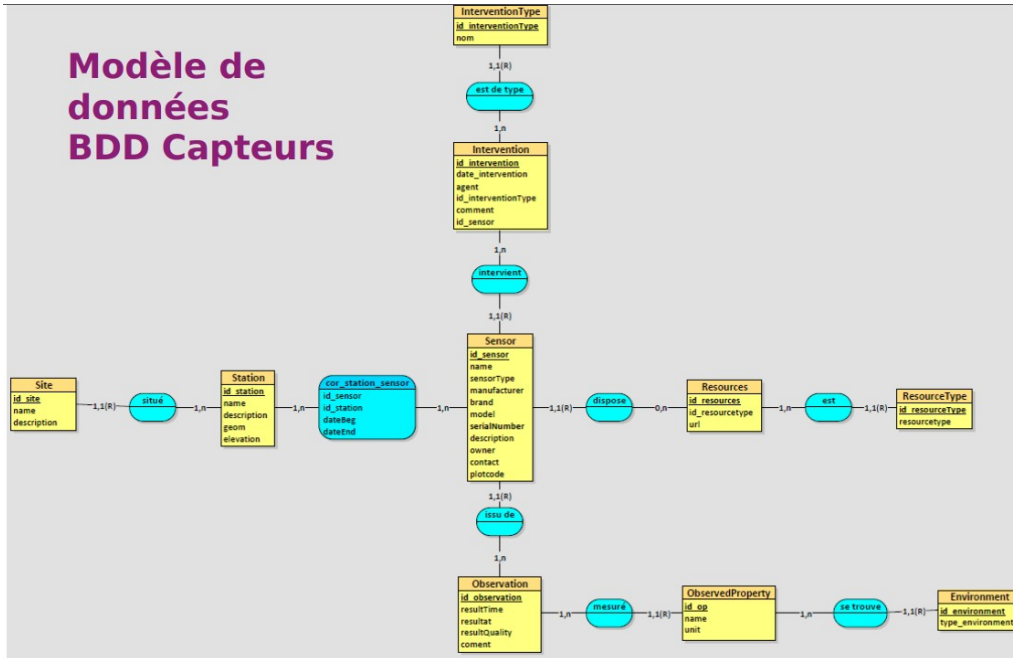
ENJEUX :

- Structurer & stocker les données mesures physiques issues des capteurs
- Visualiser et diffuser l'information au grand public
- Harmoniser et standardiser les formats de données pour l'interopérabilité
- Valoriser les données produites

- Stage BDD capteurs (2021) : <https://data.ecrins-parcnational.fr/documents/technique/si/2021-04-14-Definition-BDD-capteurs.pdf>
- Stage BDD capteurs (2021) : <https://data.ecrins-parcnational.fr/documents/technique/si/2021-07-BDD-Capteurs-PNE-standards-OGC.pdf>
- Stage réseau Lora (2021) : <https://data.ecrins-parcnational.fr/documents/technique/si/2021-Deploiement-LoraWAN-Baptiste-Garcin.pdf>

2021

Modèle de données BDD Capteurs



- Stage BDD capteurs (2021) : <https://data.ecrins-parcnational.fr/documents/technique/si/2021-04-14-Definition-BDD-capteurs.pdf>
- Stage BDD capteurs (2021) : <https://data.ecrins-parcnational.fr/documents/technique/si/2021-07-BDD-Capteurs-PNE-standards-OGC.pdf>
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2022



**Easily manage your sensor network and
distribute your data in a standard way**

*« Open software for open standard. Open standard for open data.
Open data for a better world. »*

*Institute of Earth science - SUPSI
University of Applied Sciences and Arts of Southern Switzerland*

<http://istsos.org/>

- OPENDATA
- PARTNERS
- SCIENTISTS

istSOS

- MANAGE
- EDIT
- DISTRIBUTE
- STANDARD

istSOS-viewer

- LIST MAP PROCEDURES
- FILTER PROCEDURES
- PLOT OBSERVATIONS
- EXPORT OBSERVATIONS

istSOS-import

- IMPORT RAW file
- MAP COLUMNS
- CONTROL IMPORT DATA
- EMAIL REPORT

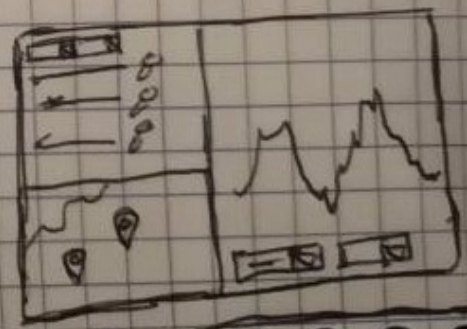
- Services
- offerings
- Procedures



- Observed-properties
- Observations
- Quality/Units

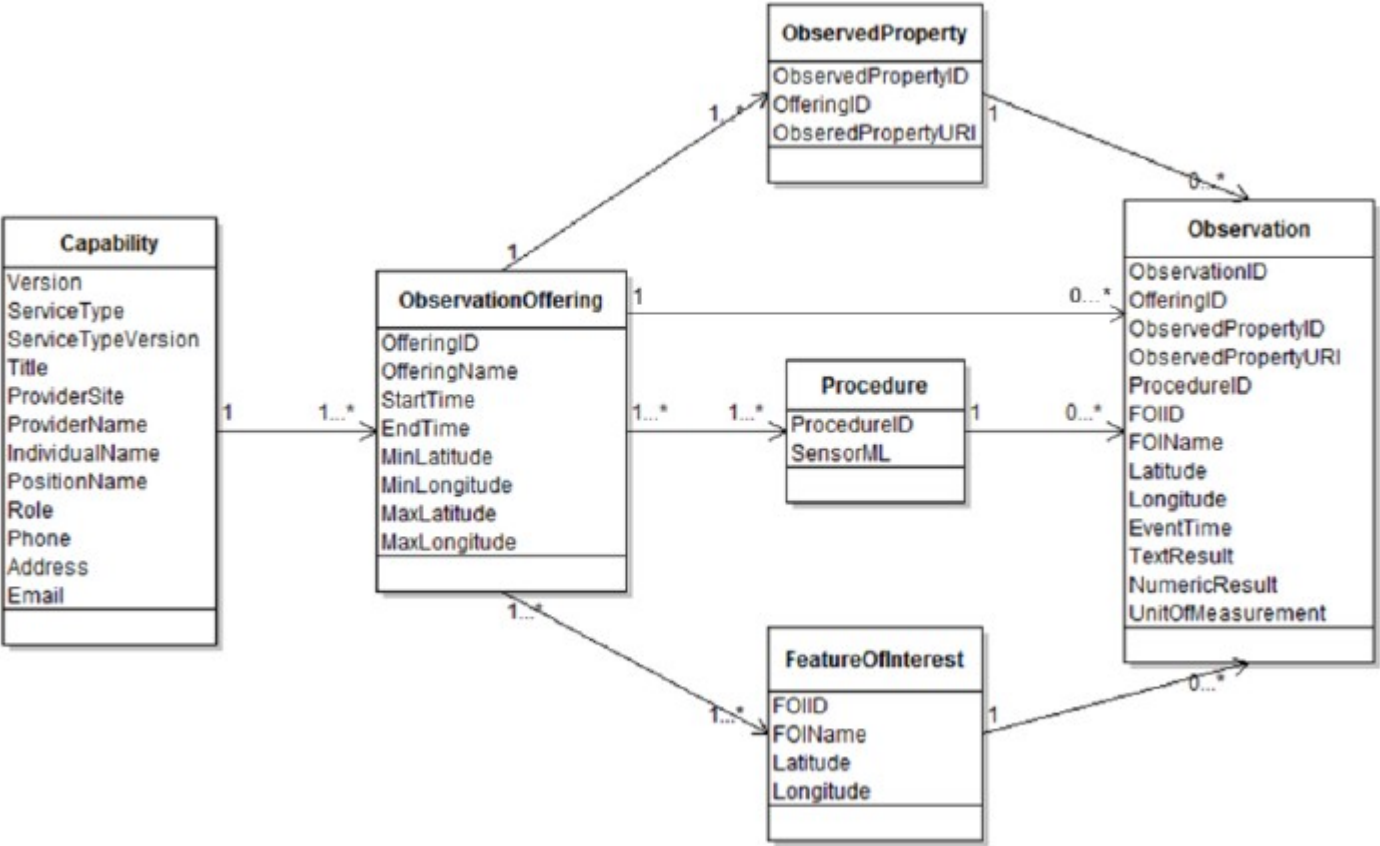
API

API



SOS (Sensor Observation Service)

International sensor data standard





Data Editor



Data Viewer

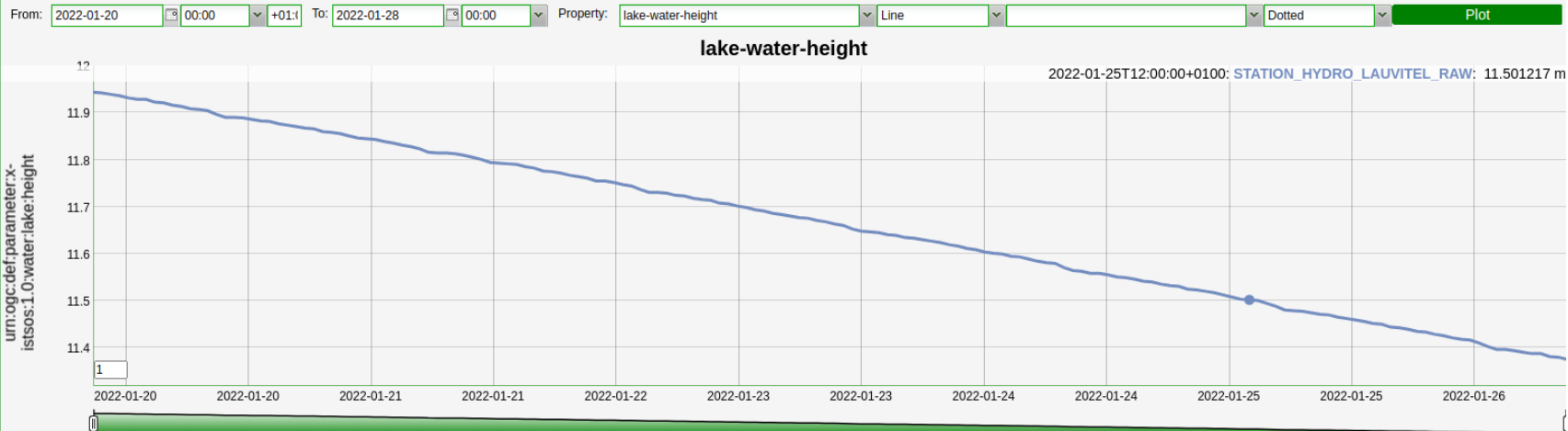
Service:

Offering:

Procedure:

☒ STATION_HYDRO_LAUVITEL

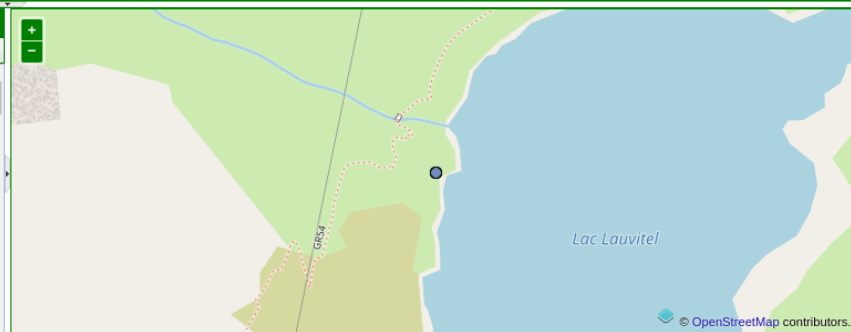
ecrins:temporary
Fr:2016-11-12T12:00:00.000000Z
To:2022-01-26T23:00:00.000000Z
lake-water-height (m)
Aggregation: no



Day Week All

Show CSV

Date	STATION_HYDRO	QI
2022-01-20T01:00:00+01:00	11.943612	210
2022-01-20T02:00:00+01:00	11.942087	210
2022-01-20T03:00:00+01:00	11.939036	210
2022-01-20T04:00:00+01:00	11.935985	210
2022-01-20T05:00:00+01:00	11.931408	210
2022-01-20T06:00:00+01:00	11.928357	210
2022-01-20T07:00:00+01:00	11.928357	210
2022-01-20T08:00:00+01:00	11.922255	210
2022-01-20T09:00:00+01:00	11.92073	210
2022-01-20T10:00:00+01:00	11.916153	210
2022-01-20T11:00:00+01:00	11.913102	210
2022-01-20T12:00:00+01:00	11.908526	210



Import list

List (5) Add Filter With selected

☐		Id Import	Procedure	File Name	Date Import	Nb Row Total	Nb Row Inserted	Error File	Timezone
☐	 	7	STATION_METEO_LAUVITEL	2022-10-27_175531.249084-Meteo_data_2002_fichier_final.csv	2022-10-27 17:55:31.258260	4869	4869		UTC
☐	 	11	STATION_HYDRO_LAUVITEL_RAW	2022-11-09_212500.935179-data_lauvitel_hydro_test.csv	2022-11-09 21:25:00.941810				
☐	 	10	STATION_HYDRO_LAUVITEL_RAW	2022-11-04_163347.098291-05061_000CW.csv	2022-11-04 16:33:47.106087				
☐	 	9	STATION_HYDRO_LAUVITEL_RAW	2022-11-03_132412.274859-synthese_metadata_2022-10-20T14_24_31.7997.csv	2022-11-03 13:24:12.284537				
☐	 	8	STATION_HYDRO_LAUVITEL_RAW						

New import

Istos-Import

Fields mapping

Procedure : STATION_HYDRO_LAUVITEL_RAW

Observed properties

File columns

Date

date

lake-water-height

lak_height

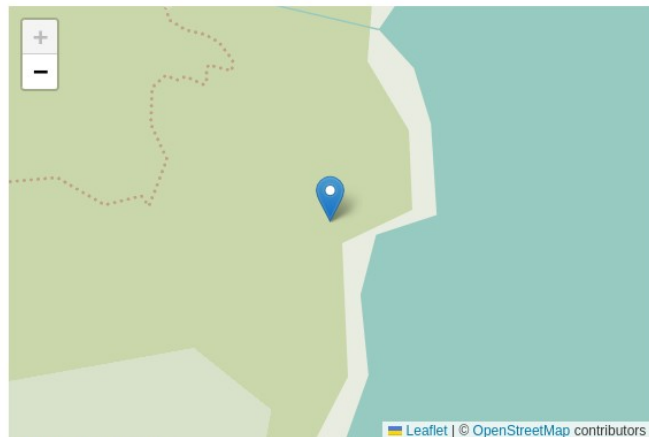
Send data

STATION_HYDRO_LAUVITEL_RAW

Station hydrologique du lauvitel

Sensor type : insitu-fixed-point

Time series : From 2016-11-12T13:00:00+0100 to 2022-01-27T00:00:00+0100



Observed properties

- lake-water-height (m)

Data



From 11/12/21, 1:00 PM to 1/27/22, 12:00 AM

Observed properties
lake-water-height

Plot type
lines



Start date
11/12/2016



End date
1/27/2022



MM/DD/YYYY

MM/DD/YYYY

Plot

Export