A station book for AlpArray

WHY?: to gather the same/homogeneous information for all the AlpArray temporary (at least) stations.

EFFORT?: depending on the tool and on the amount of info we keep.

USEFUL?: yes, especially in the future, when the project is over.

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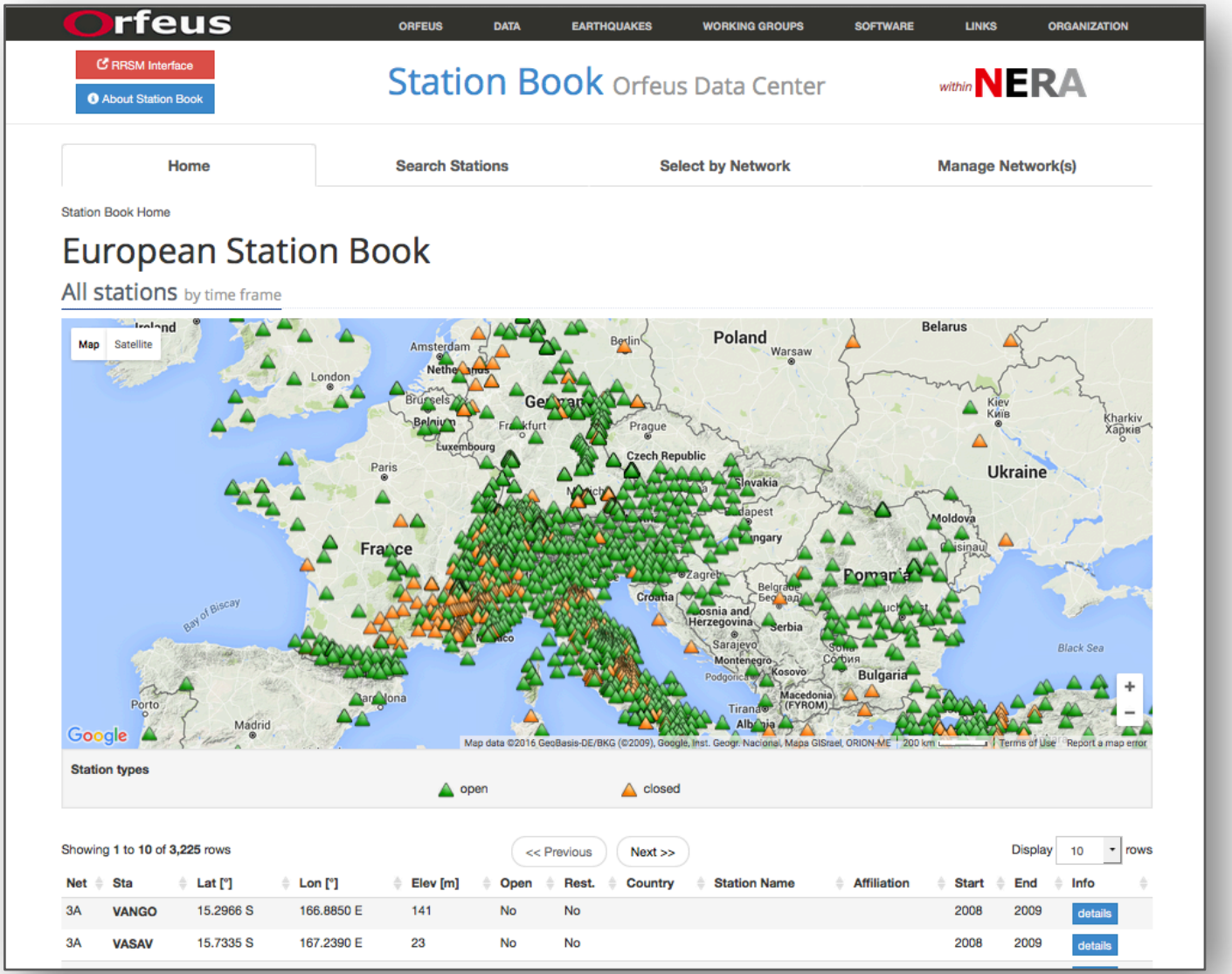
Orfeus
NERA

have already developed a tool that could be interesting for AlpArray

www.orfeus-eu.org/stationbook page

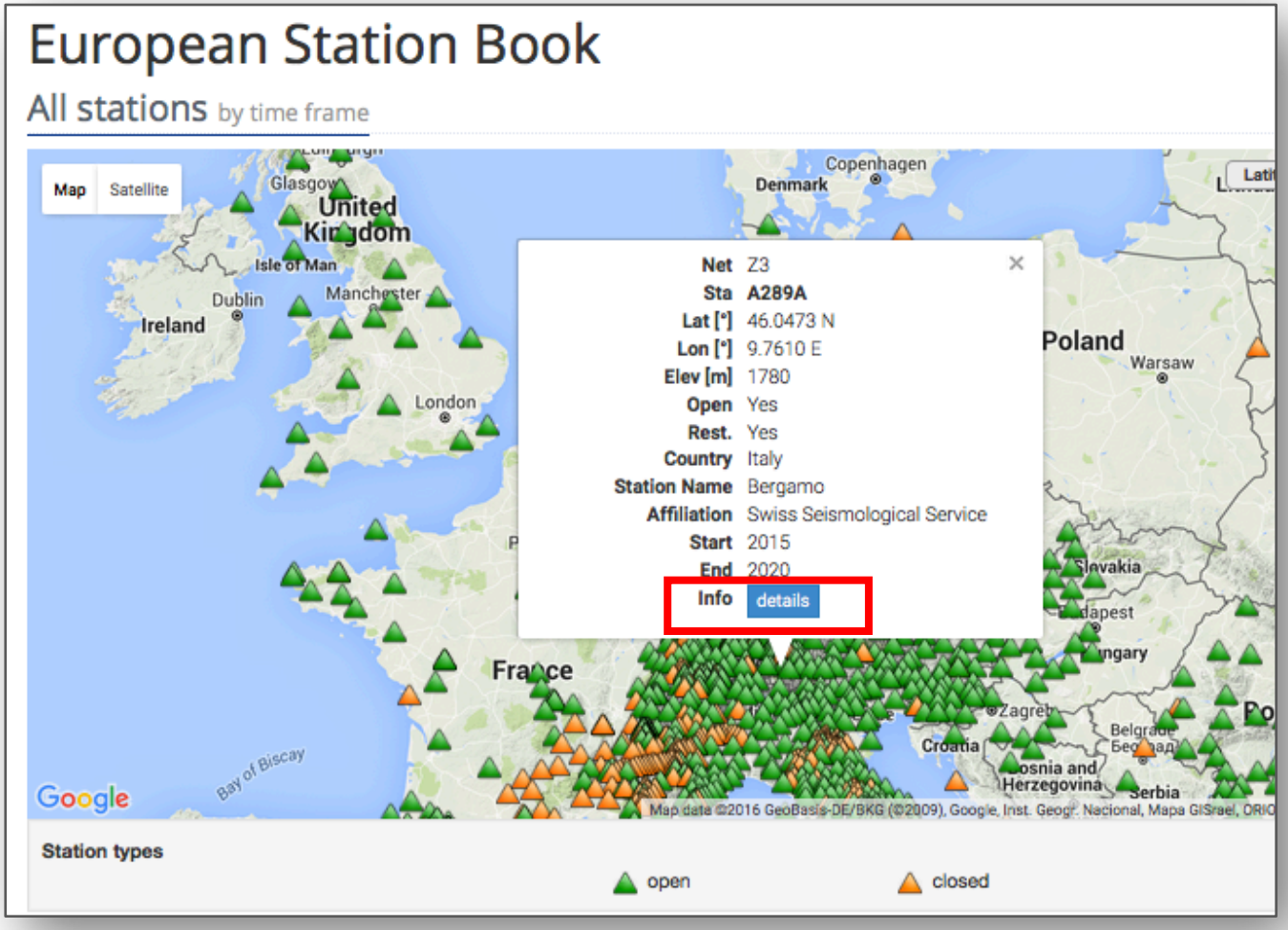
All the stations available in EIDA are showed here



www.orfeus-eu.org/stationbook page

All the stations available in EIDA are listed here…

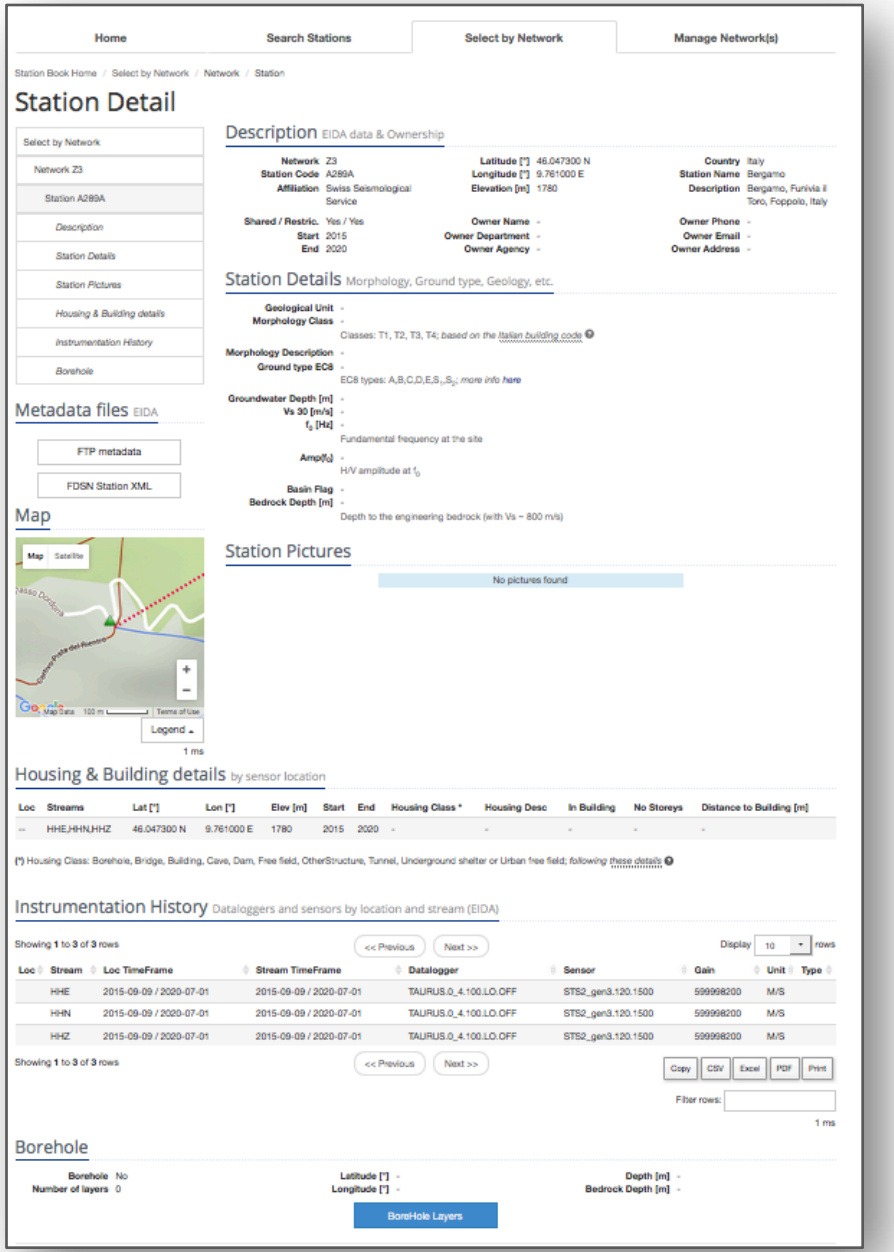
…with the standard information available in the metadata

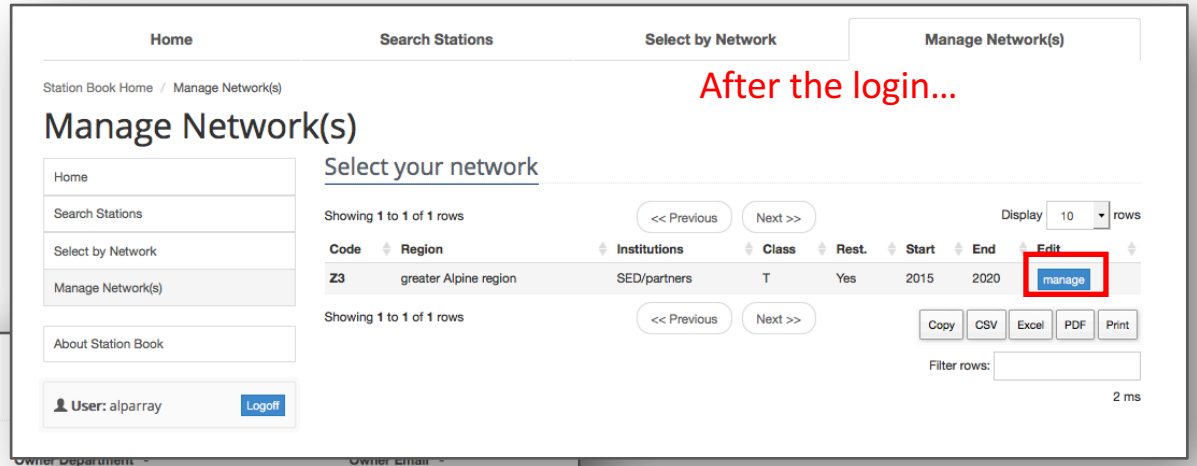


Station details

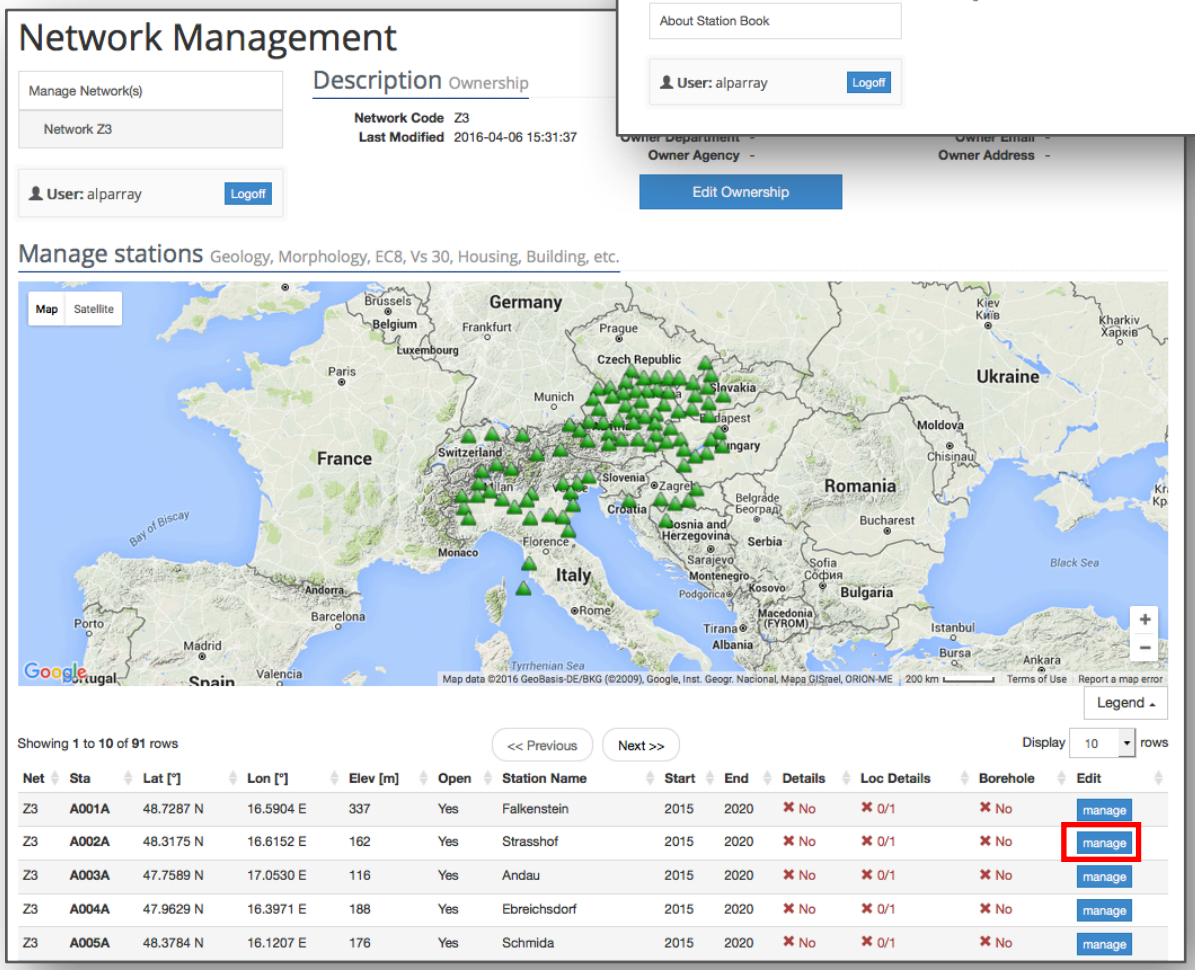
EIDA Standard Metadata	Edited by Network Operators
Network	**Network**
Code	Ownership
Time Frame	**Station**
Region, Institutions, Archive and Description	Ownership
Type, Class and Restriction	Pictures
Station	Geological Unit
Code	Morphology
Location	Ground type EC8
Time Frame	Vs 30
Name, Affiliation, Country and Description	f_0 and Amp(f_0)
Class and Restriction	Basin Flag
Sensor Location	Groundwater Depth
Code	Bedrock Depth
Location	Borehole Depth and Bedrock Depth
Time Frame	Geology of Borehole Layers
Stream	**Sensor Location**
Code	Housing details
Time Frame	Building details
Instrumentation History	

- Morphology, Ground type, Geology, Basin flag
- Stations pictures and description
- Housing and building details





After the login…



Select the station

Station Management

Manage Network(s)

Network Z3

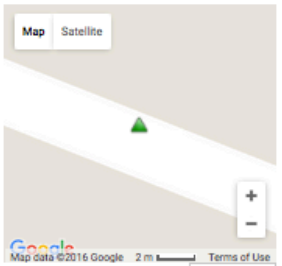
Station A260A

User: alparray Logoff

Station data (EIDA)

Network	Z3
Code	A260A
Affiliation	KRSZO
Latitude [°]	47.283420 N
Longitude [°]	16.705560 E
Elevation [m]	243
Country	Hungary
Station Name	Vassurany
Description	Vassurany, Hungary
Shared / Restric.	Yes / Yes
Start	2016
End	2020

Map



Legend -

1 ms

Description Name & Ownership

Station Code	A260A	**Owner Name**	-	**Owner Phone**	-
Station name	Vassurany	**Owner Department**	-	**Owner Email**	-
Last Modified	2016-04-06 15:31:38	**Owner Agency**	-	**Owner Address**	-

Edit Description

Station Details Morphology, Ground type, Geology, etc.

Geological Unit -
Morphology Class -
Classes: T1, T2, T3, T4; *based on the Italian building code*
Morphology Description -
Ground type EC8 -
EC8 types: A,B,C,D,E,S_1,S_2; *more info here*
Groundwater Depth [m] -
Vs 30 [m/s] -
f_0 [Hz] -
Fundamental frequency at the site
Amp(f_0) -
H/V amplitude at f_0
Basin Flag -
Bedrock Depth [m] -
Depth to the engineering bedrock (with Vs ~ 800 m/s)

Edit Station Details

Manage sensor locations Housing & Building details

Loc	Streams	Lat [°]	Lon [°]	Elev [m]	Start	End	Location Details	Edit
00	HHE,HHN,HHZ,SHE,SHN,SHZ	47.283420 N	16.705560 E	243	2016	2020	✖ No	manage

Copy Data Between Locations

Station Pictures

Picture Number	Picture	Description	Manage
			+ Add Picture

Borehole

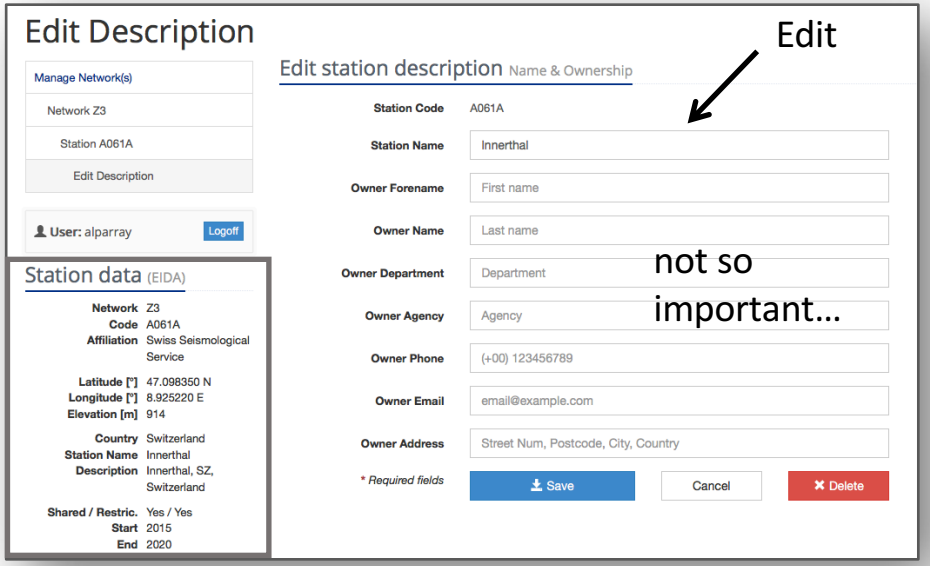
EIDA Station Code	A260A	**Latitude [°]**	-	**Bedrock Depth [m]**	-
Borehole	No	**Longitude [°]**	-	**Number of layers**	0
Last Modified	-	**Depth [m]**	-		

Edit Borehole

Borehole Layers

Layer Number	Top Depth [m]	Bottom Depth [m]	Description	Manage
				first create borehole data to be able to add layers

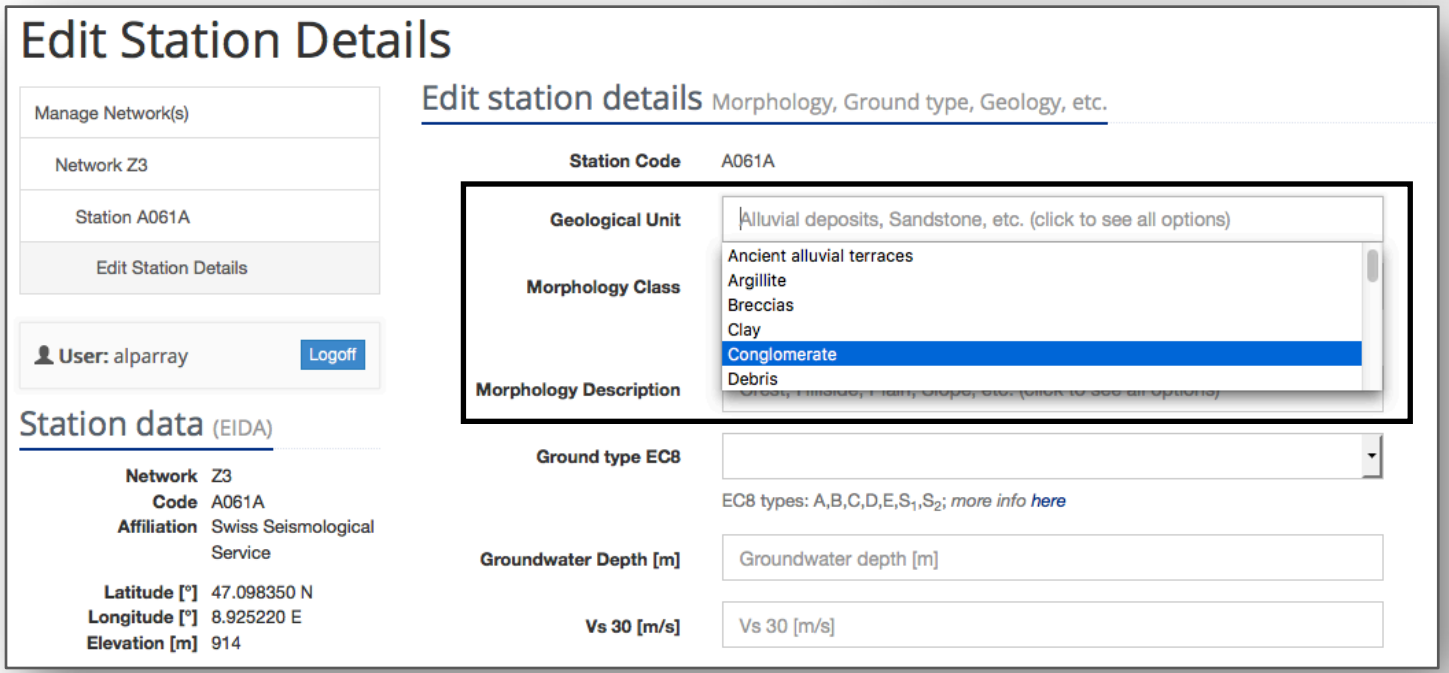
Station description



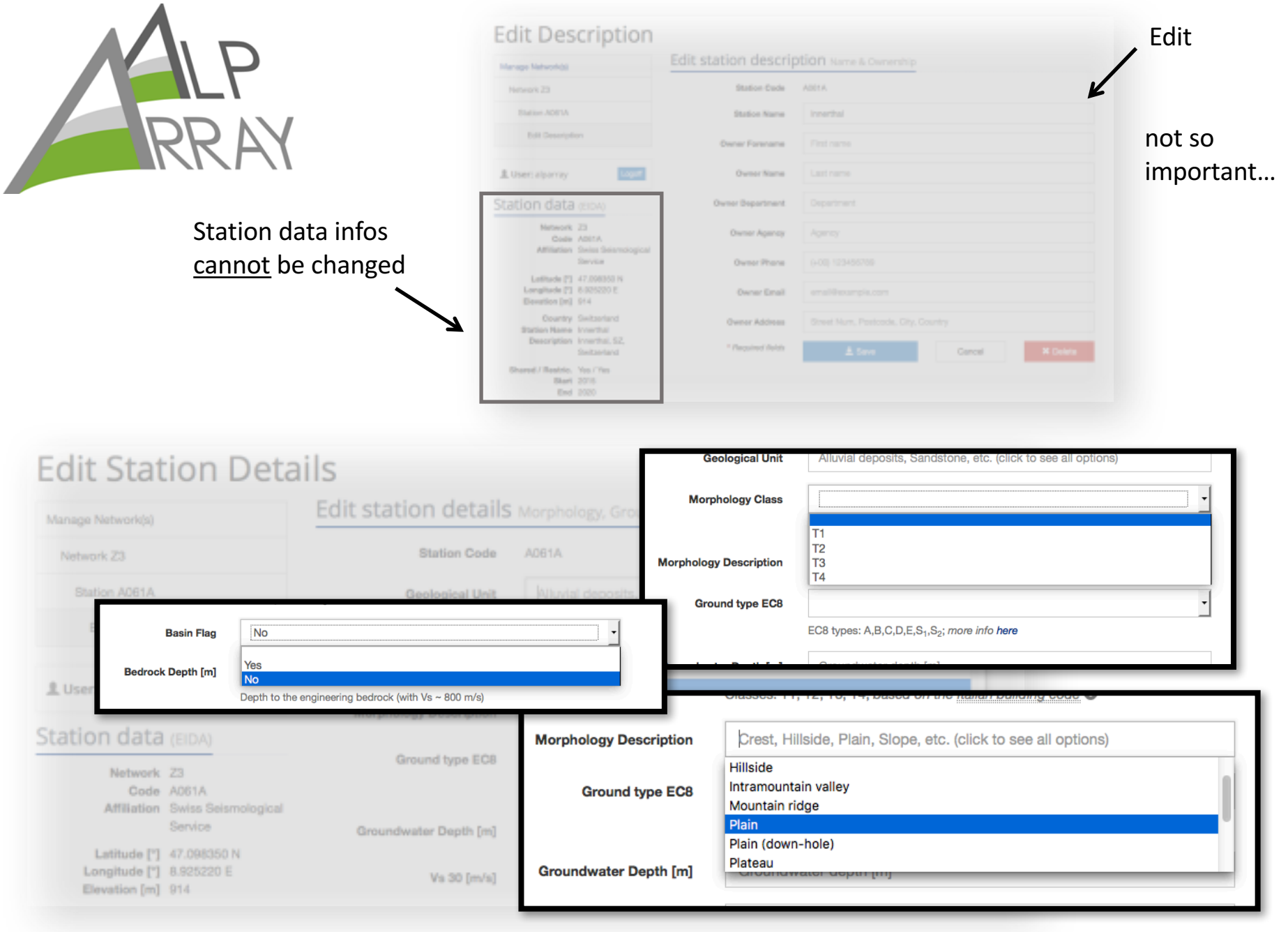
Edit

not so important…

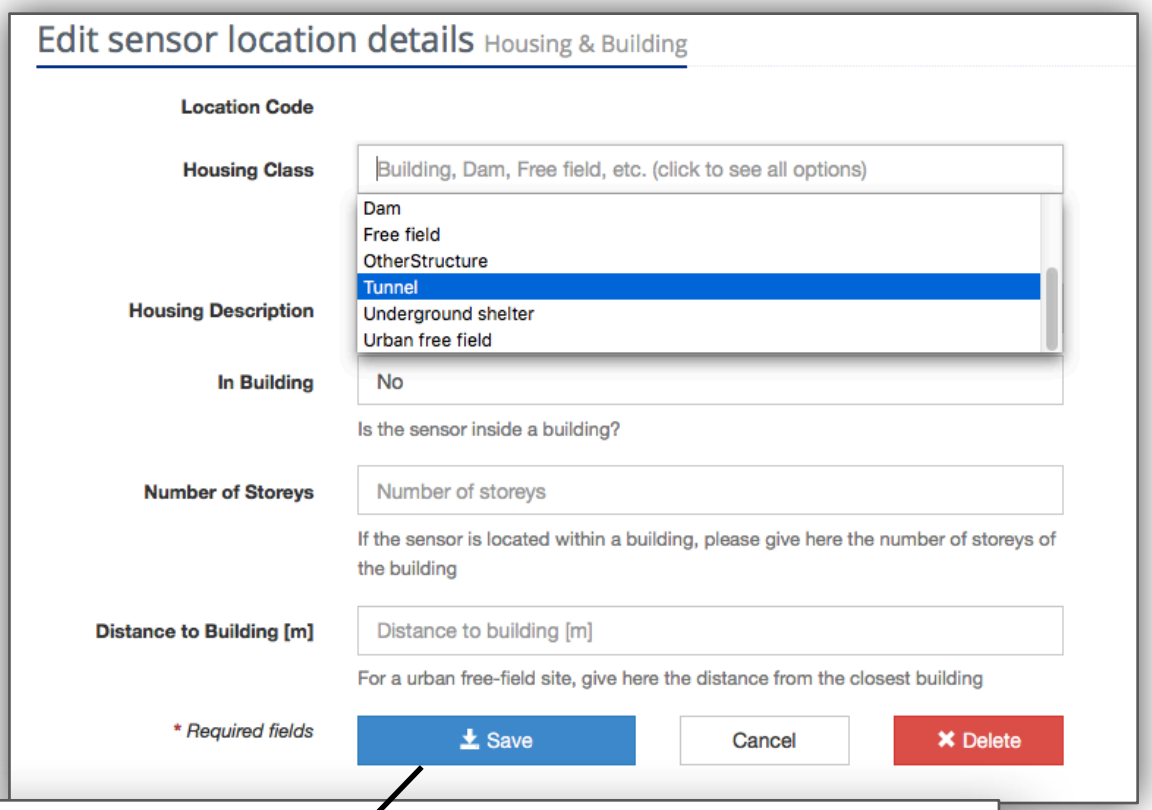
Station data infos cannot be changed

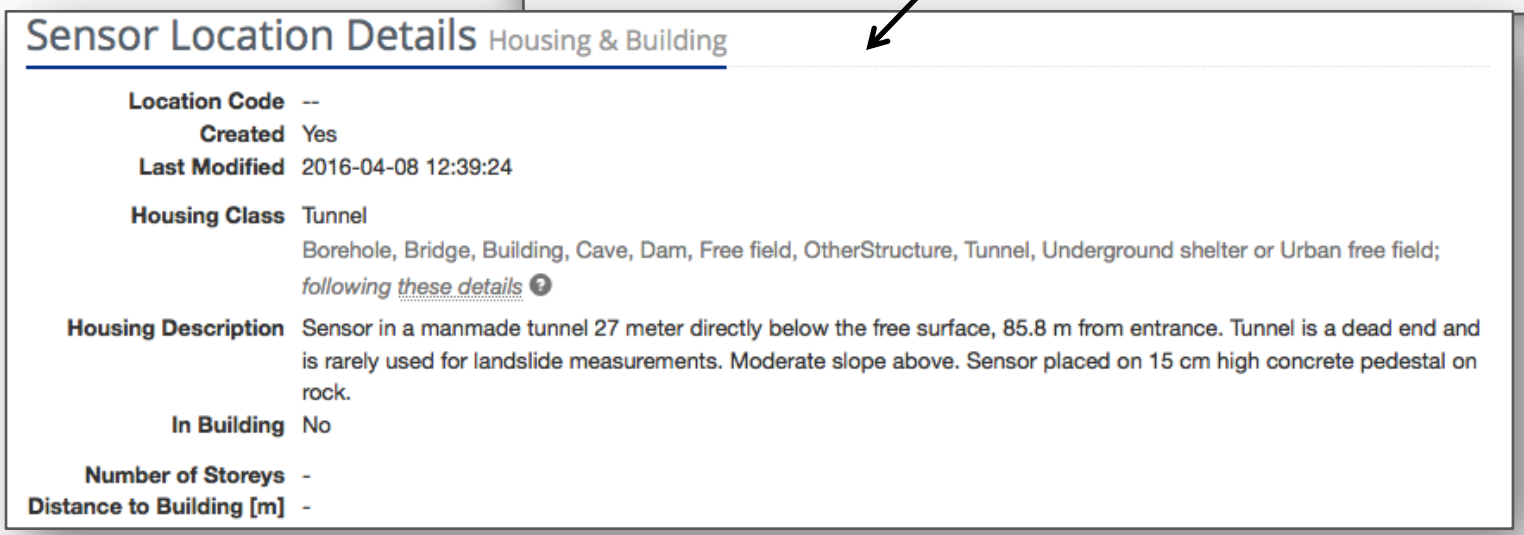


Station details


Edit Description
Edit station description
Edit
not so important…
Station data infos cannot be changed
Station data (EIDA)
Edit Station Details
Edit station details
Geological Unit
Alluvial deposits, Sandstone, etc. (click to see all options)
Morphology Class
T1
T2
T3
T4
Morphology Description
Ground type EC8
EC8 types: A,B,C,D,E,S1,S2; more info here
Basin Flag
No
Yes
No
Bedrock Depth [m]
Depth to the engineering bedrock (with Vs ~ 800 m/s)
Crest, Hillside, Plain, Slope, etc. (click to see all options)
Hillside
Intramountain valley
Mountain ridge
Plain
Plain (down-hole)
Plateau
Groundwater Depth [m]
Network Z3
Code A061A
Affiliation Swiss Seismological Service
Latitude [°] 47.098350 N
Longitude [°] 8.925220 E
Elevation [m] 914

Sensor location details





Pictures

Edit station picture

File Class	picture
File Type	-
File Name	-
File URL	-
Picture Description *	Picture Description

Browse... No file selected.

lect the file to upload

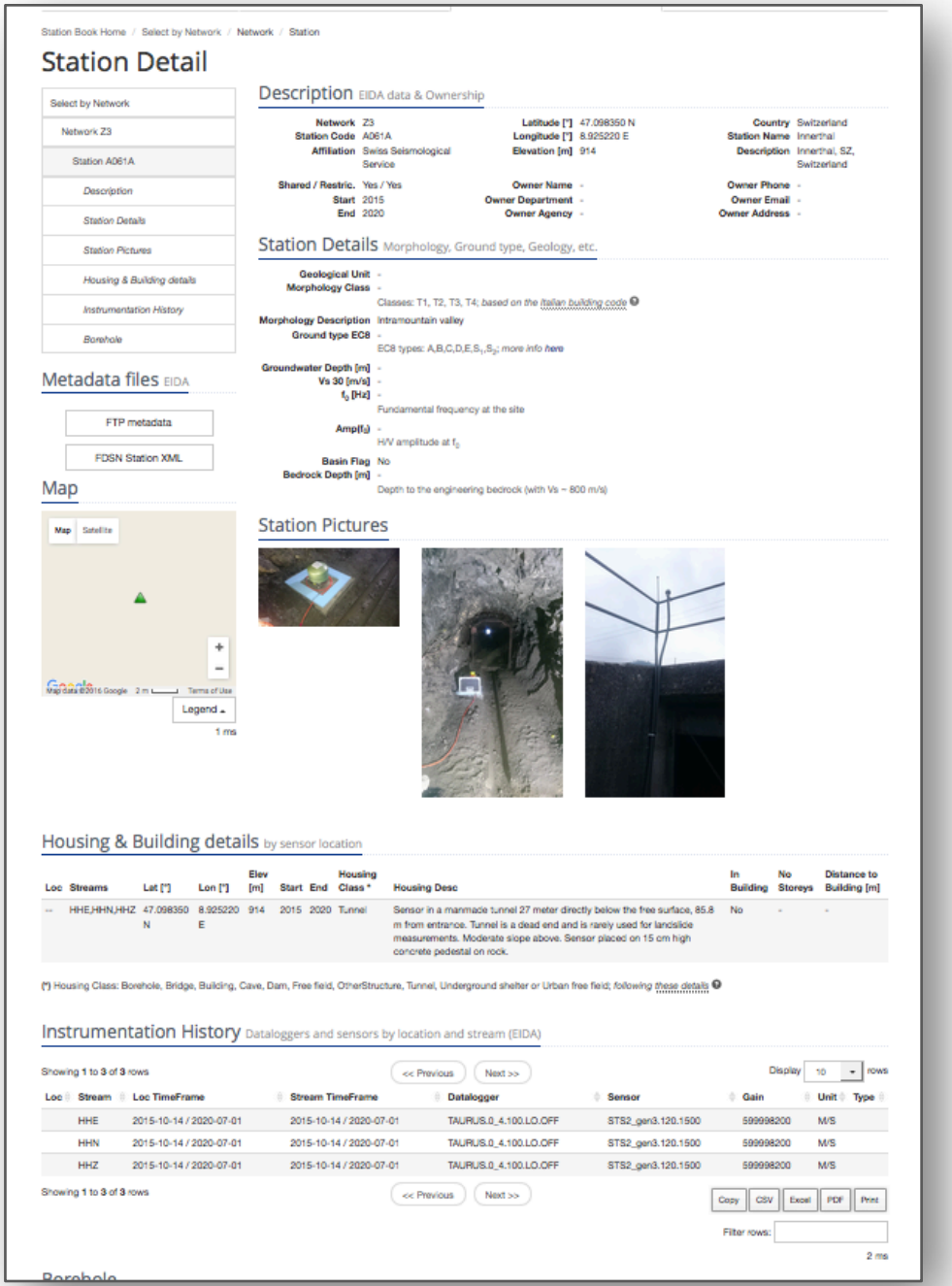
Save | Cancel | Delete

Station Pictures

Picture Number	Picture	Description	Manage
#1		STS-2 120s sensor is placed on 15 cm high concrete pedestal on rock. The digitiser (Taurus) and the battery are placed 2 meters away from the sensor.	edit / delete
#2		Sensor in a manmade tunnel 27 meter directly below the free surface, 85.8 m from entrance. Tunnel is a dead end and is rarely used for landslide measurements. Moderate slope above.	edit / delete
#3		The site has real time communications. GPS and GPRS antenna are located at the entrance of the tunnel. The power source is main power.	edit / delete

+ Add Picture

Final Station page



Station Book Home / Select by Network / Network / Station

Station Detail

Select by Network
Network Z3
Station A061A
Description
Station Details
Station Pictures
Housing & Building details
Instrumentation History
Borehole

Metadata files EIDA

FTP metadata
FDSN Station XML

Map

Map Satellite
Legend
1 ms

Description EIDA data & Ownership

Network	Z3	**Latitude [°]**	47.098350 N	**Country**	Switzerland
Station Code	A061A	**Longitude [°]**	8.925220 E	**Station Name**	Innerthal
Affiliation	Swiss Seismological Service	**Elevation [m]**	914	**Description**	Innerthal, SZ, Switzerland
Shared / Restric.	Yes / Yes	**Owner Name**	-	**Owner Phone**	-
Start	2015	**Owner Department**	-	**Owner Email**	-
End	2020	**Owner Agency**	-	**Owner Address**	-

Station Details Morphology, Ground type, Geology, etc.

Geological Unit -
Morphology Class -
Classes: T1, T2, T3, T4; *based on the Italian building code*
Morphology Description Intramountain valley
Ground type EC8 -
EC8 types: A,B,C,D,E,S_1,S_2; *more info here*
Groundwater Depth [m] -
Vs 30 [m/s] -
f_0 [Hz] -
Fundamental frequency at the site
Amp(f_0) -
H/V amplitude at f_0
Basin Flag No
Bedrock Depth [m] -
Depth to the engineering bedrock (with Vs ~ 800 m/s)

Station Pictures

Housing & Building details by sensor location

Loc	Streams	Lat [°]	Lon [°]	Elev [m]	Start	End	Housing Class *	Housing Desc	In Building	No Storeys	Distance to Building [m]
--	HHE,HHN,HHZ	47.098350 N	8.925220 E	914	2015	2020	Tunnel	Sensor in a marmade tunnel 27 meter directly below the free surface, 85.8 m from entrance. Tunnel is a dead end and is rarely used for landslide measurements. Moderate slope above. Sensor placed on 15 cm high concrete pedestal on rock.	No	-	-

(*) Housing Class: Borehole, Bridge, Building, Cave, Dam, Free field, OtherStructure, Tunnel, Underground shelter or Urban free field; *following these details*

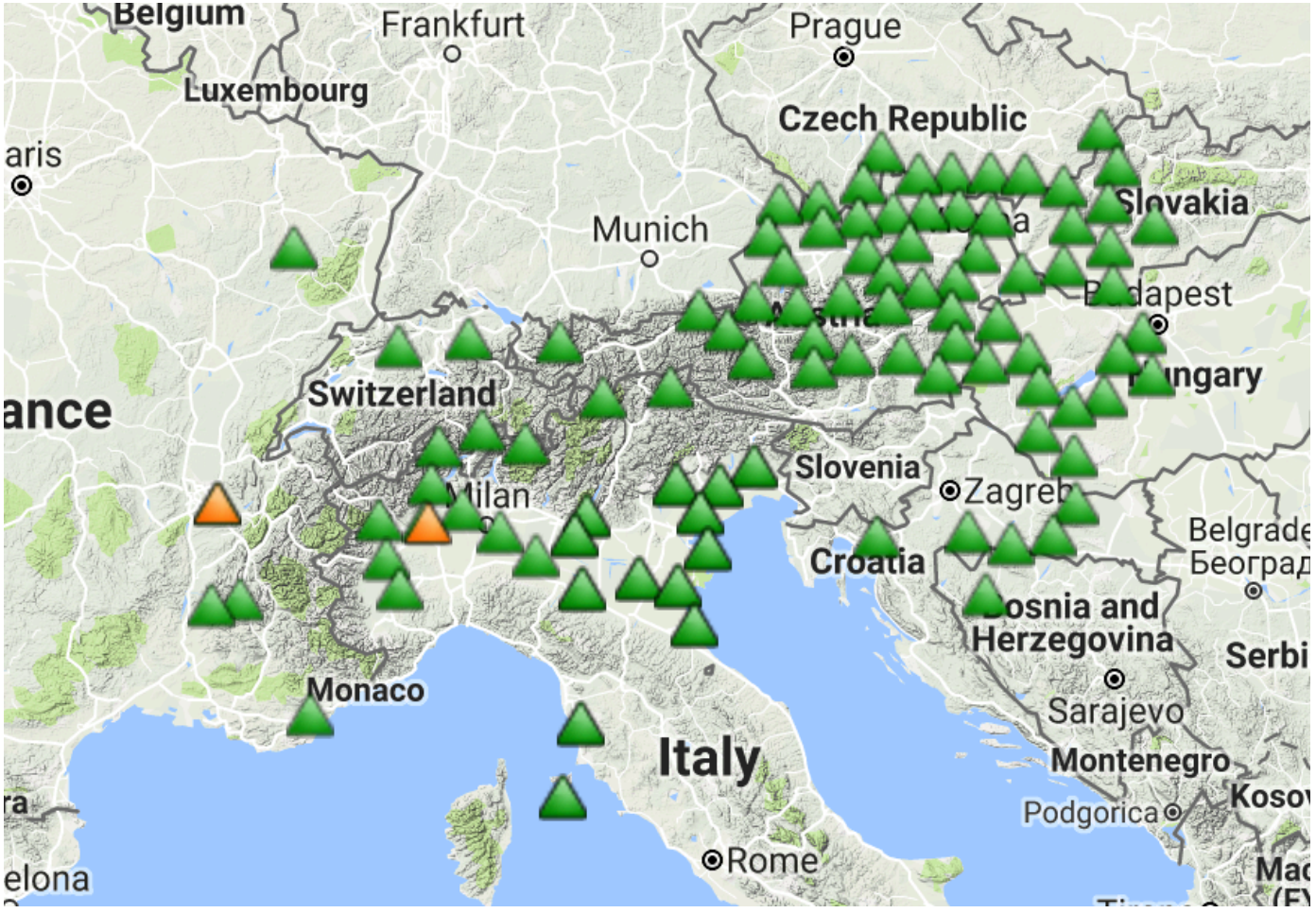
Instrumentation History Dataloggers and sensors by location and stream (EIDA)

Showing 1 to 3 of 3 rows << Previous Next >> Display 10 rows

Loc	Stream	Loc TimeFrame	Stream TimeFrame	Datalogger	Sensor	Gain	Unit	Type
	HHE	2015-10-14 / 2020-07-01	2015-10-14 / 2020-07-01	TAURUS.0_4.100.LO.OFF	STS2_gen3.120.1500	599998200	M/S	
	HHN	2015-10-14 / 2020-07-01	2015-10-14 / 2020-07-01	TAURUS.0_4.100.LO.OFF	STS2_gen3.120.1500	599998200	M/S	
	HHZ	2015-10-14 / 2020-07-01	2015-10-14 / 2020-07-01	TAURUS.0_4.100.LO.OFF	STS2_gen3.120.1500	599998200	M/S	

Showing 1 to 3 of 3 rows << Previous Next >>
Copy CSV Excel PDF Print
Filter rows:
2 ms

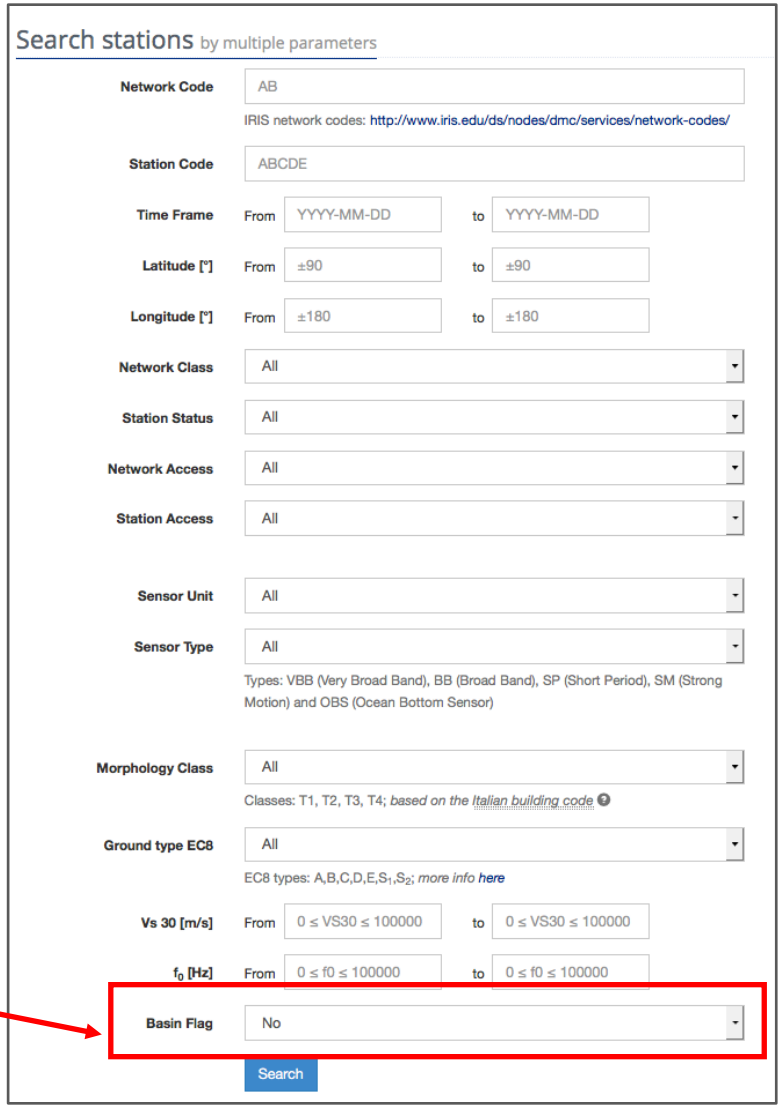
Borehole


Belgium
Frankfurt
Prague
Luxembourg
Czech Republic
Munich
Slovakia
Switzerland
Slovenia
Zagreb
Croatia
Monaco
Italy
Sarajevo
Montenegro
Podgorica
Rome

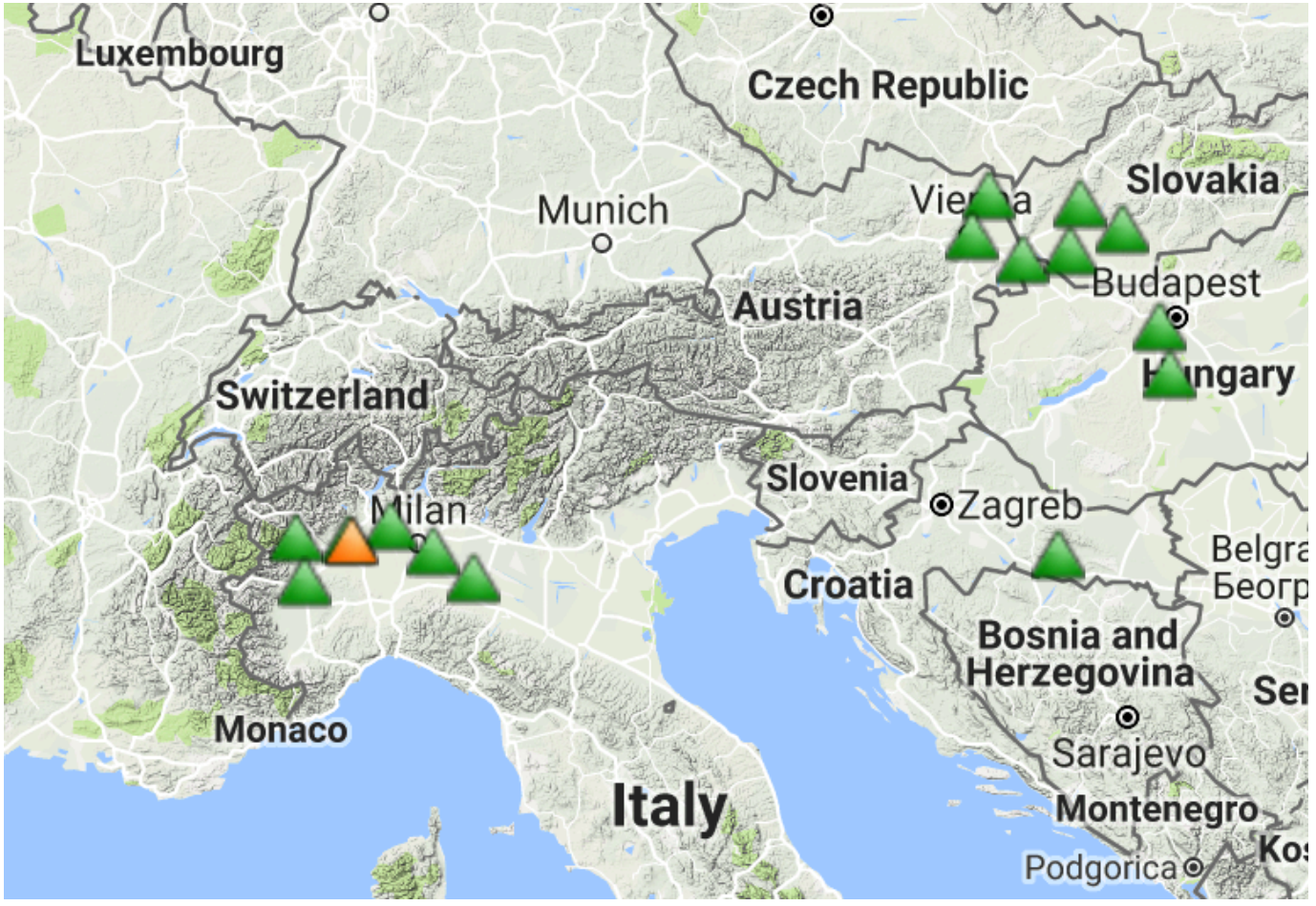
We can search for stations that fulfill different criteria, not only position or type of sensor/channel (HH*, BH*, etc..).

Search for all the stations that are in a basin

Basin flag = yes



Basin Flag ON



Some modifications?

- Possibility to add comments → now we insert them in the picture caption
- Possibility to contact the person in charge for that station

Why it might be useful

- Would be useful if also the permanent networks fill the station book
- Even after years you can see how the station was installed and where
- Uniform information for all the stations
- Which were the issues at this particular site
- Easier if station book become a best practice right after the station installation (5-10 min to fill the format)