ECOTAXA

IMPORTING Underwater Vision Profiler (UVP6) data into THE PARTICLE module of ECOTAXA

Quantitative Imaging Platform of Villefranche sur Mer (PIQv)

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Date	Name operator	Object	File
2021/08/25	Picheral Marc	Creation	ECOTAXA_Import_UVP6_data_in_Particule_Module.docx
2022/06/07	Picheral Marc	Edition	ECOTAXA_Import_UVP6_data_in_Particule_Module.docx

Summary

1 Preliminary verification using UVPapp

The data processing application is UVPapp.

The data to be imported in Ecotaxa and Ecopart must be checked for complete processing of all samples (profiles) in UVPapp.

All metadata, including “first image” value should be carefully filled in the sample metdata sections before processing.

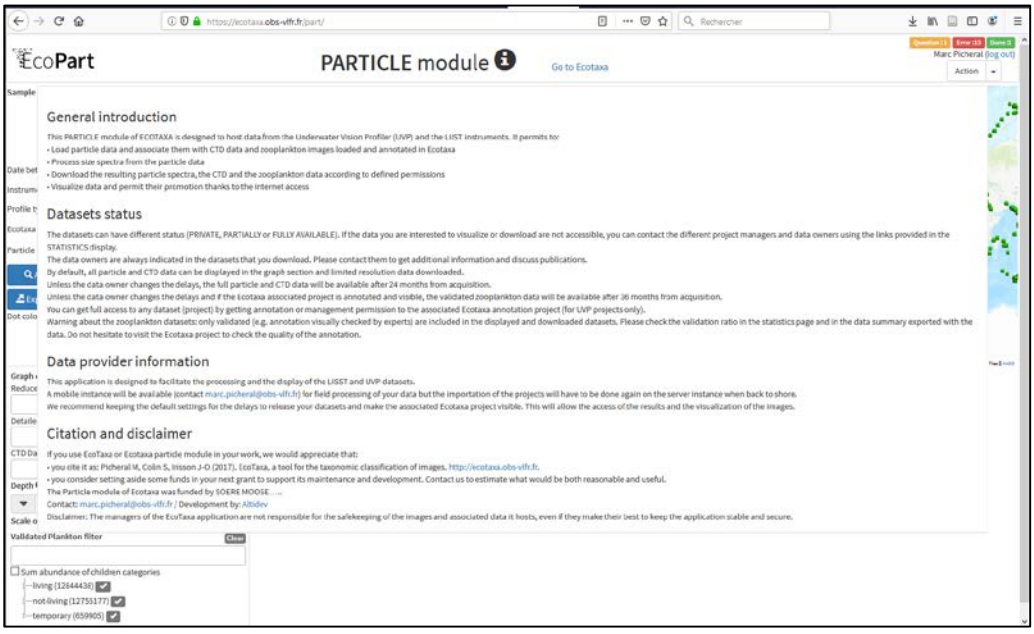
The Project metdata must be documented before you import the data in EcoPart.

We do consider that the original project is on your drive, possibly copied into the PIQv image drive and that any change must be done on the project using UVPapp and then propagated to the EcoPart/EcoTaxa projects by re-importing the metadata and data.

2 General procedure

2.1 General information

We recommend that you read the information form the information button on top of the Particle module page in order to get information about EcoPart.



You must also be registered user in Ecotaxa and obtain the Project Creation permission to create a new project in Ecopart. Request this permission if necessary.

2.2 Load project into the Ecotaxa FTP depository

See the dedicated **TUTORIAL** for the FTP transfer of your data to be imported (do only the FTP transfer). The importation of the images in Ecotaxa will be done AFTER the particles data have been imported in EcoPart.

The project must not be zipped to allow its importation in EcoPart. The file transfer may thus take long time. An alternative solution can be to send the PIQv a USB drive containing the projet or load a zipped project and ask us to unzip it into the local project drive of the server. The PIQv cannot guaranty a rapid service as we may be busy with other tasks but we will always keep you informed.

2.3 Ecotaxa Importing steps

Here we detail the standard procedure for new projects. Users can reuse this information to proceed with the second procedure in case images have already been imported.

If used at sea on a mobile instances of Ecopart/Ecotaxa, the importation procedure can be repeated everytime new samples get available in the project. A final import of the particle data will be necessary when back on land, using the FTP transfer of the data while the classified vignettes can be imported separately after a backup export in ecotaxa.

2.3.1 Standard procedure

1. Create the project in EcoPart
2. Check project metadata
3. Import samples
4. Check imported data
5. Import images in Ecotaxa

2.3.2 Procedure for project whichi images are already imported in Ecotaxa

1. Create the project in EcoPart
2. Check project metadata
3. Link the Ecotaxa project (by selecting the proper project)
4. Import samples
5. Check imported data

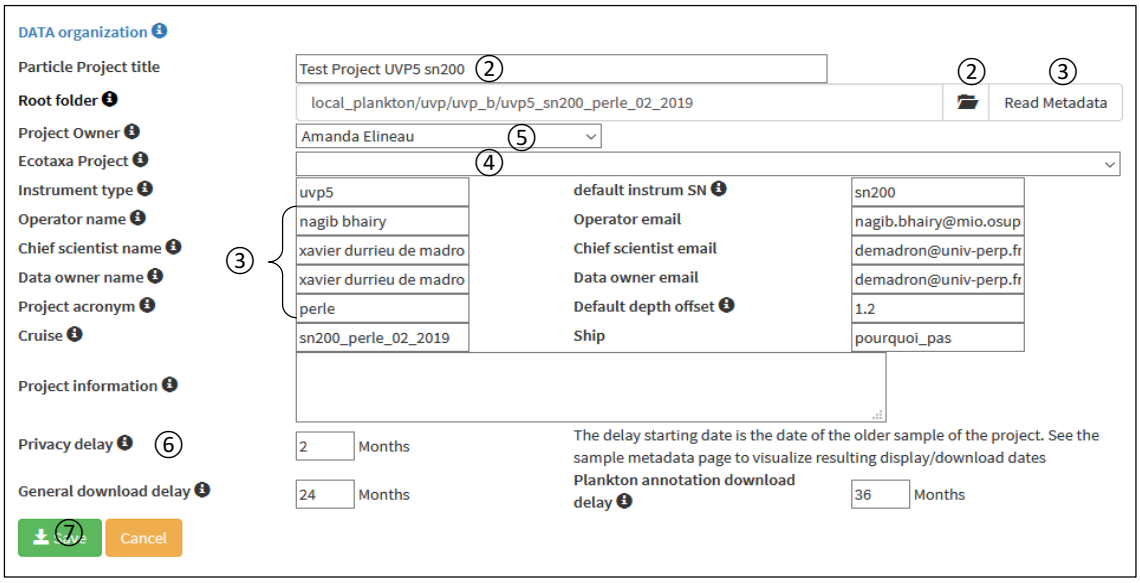
2.4 Project creation in EcoPart

It is recommended that you read all information buttons in the page if you are not familiar with EcoPart.

① On the Ecotaxa home page, click on “Action” button > “Particle projects management” tool > “Create a new Particle project” green button

② Name your project (Particle Project title) by coying the name of the Project to be imported. Select the root folder of your project from the FTP or the local UVP drives. The project name should start by “UVP6” according to the model of your instrument.

③ The metadata from the “cruise_info.txt” file of the project will be automatically filled when your press “Read metadata” :



If the values are not correct or documented, you can edit the Project metadata in UVPapp, re-upload the header file from the meta folder into the FTP and then click on “Read Metadata” button to update.

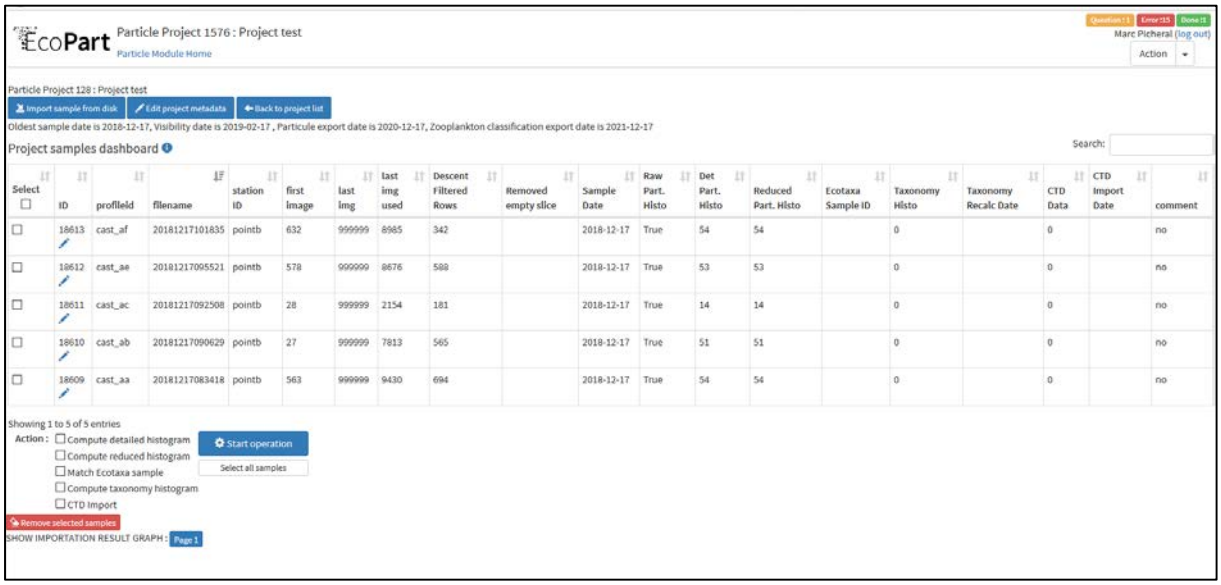
④ The standard procedure is to use the “Create Ecotaxa project” tool to create a new project in which you will later import the images from the project. The alternative option is to link an existing Ecotaxa project if you already loaded the images (not recommended).

⑤ Set carefully the project owner from the list of Ecotaxa registered users. This people will be the only person allowed to later access to the project management page.

⑥ Change the different delays if necessary

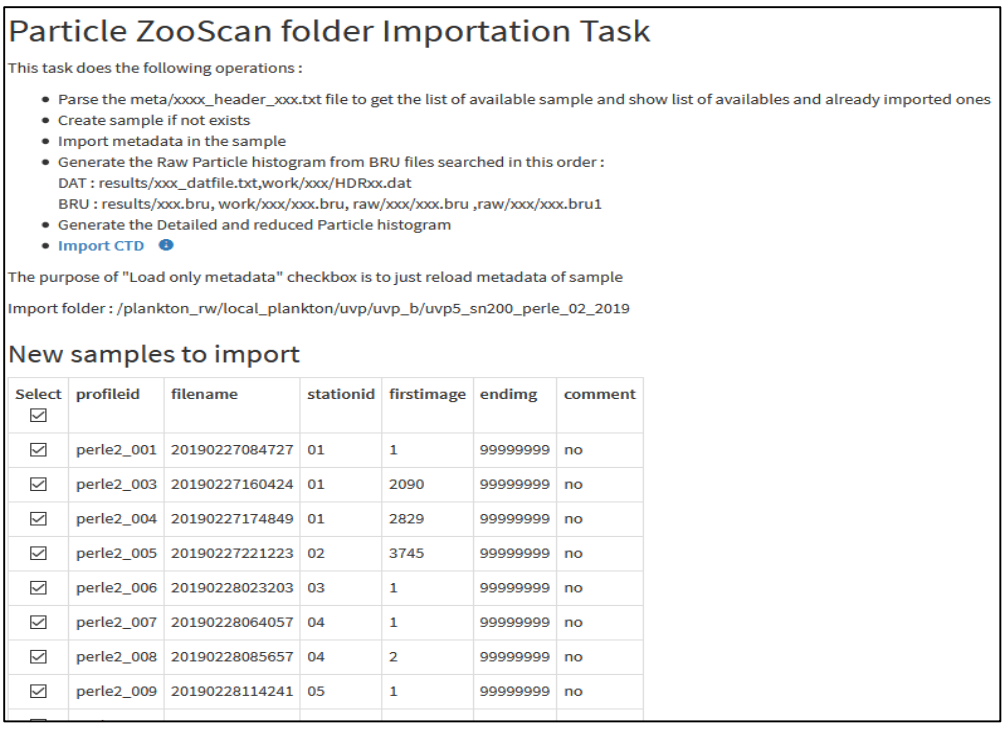
⑦ Click on the “Save” button

You get then to the Project sample dashboard which will be empty at the start of the operations.



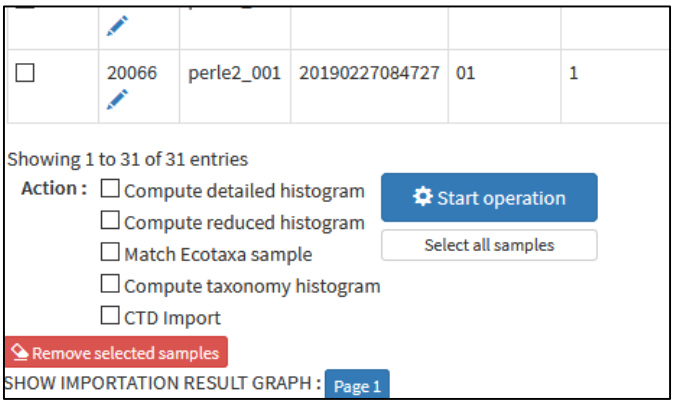
2.5 Import sample

Select the “Import sample from disk” tool to import the samples.

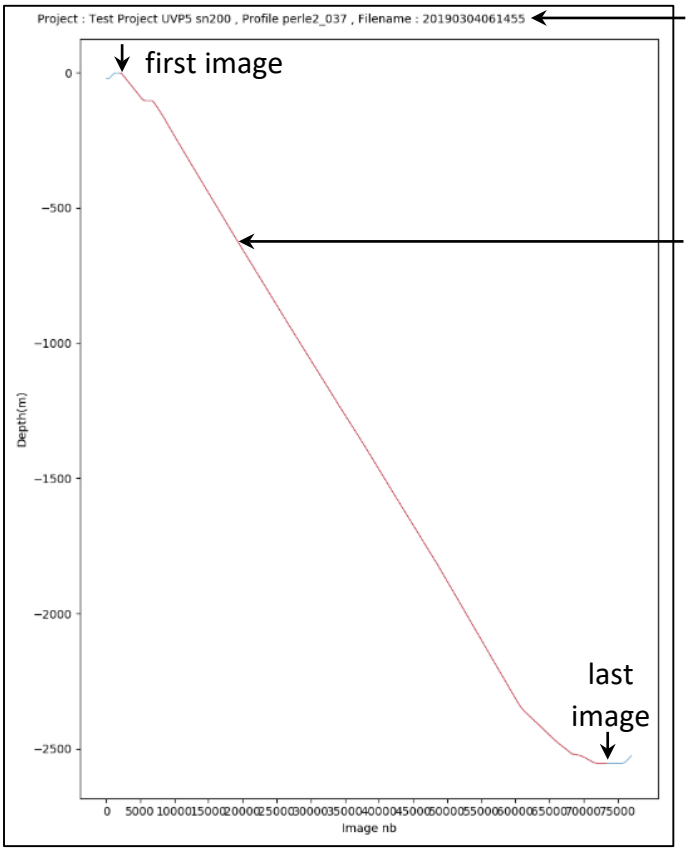


2.6 Quality Check : Images start & last for Depth profiles (samples)

Click on « SHOW IMPORTATION RESULT GRAPH »



The control figures will be displayed, use the selected zoom setting :

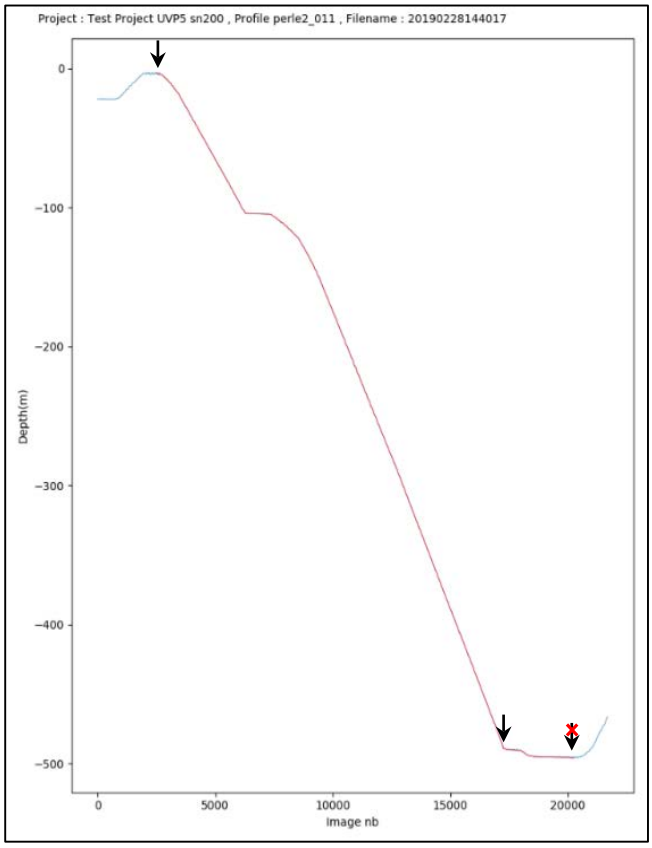


The name of your cast from the raw folder

The red line represents the range of images (between First and Last images) used for the treatments

The first image must to correspond at the depth where the UVP6 started to provide good data (after start of the descent and not impacted by sunlight).

The last image must to correspond at the depth where the UVP6 finished the dive and avoid keeping the data from the bottom standby if exists.

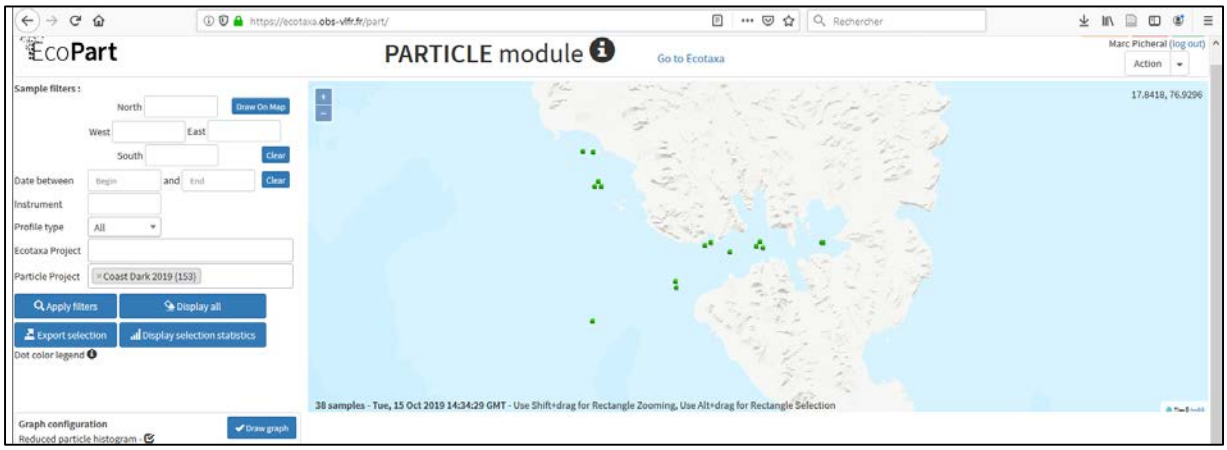


Procedure to modify the range of images:

1. Use UVPapp to edit the sample (profile) metadata and change the first and last image information (if necessary).
2. Re-process the DATA and IMAGES in UVPapp
3. Re-import the header file from the meta folder of project (via FTP if necessary)
4. Re-import the files (*_Images.zip and *_Particule.zip) of the corrected samples (profiles) from the Ecodata folder of the project
5. Redo the step ③ to read the updated metadata
6. Re-import the samples in EcoPart

2.7 Verification of positions of the samples

It is then usefull to check that the samples (profiles) are correctly positioned on the map.



1. On the Ecotaxa home page, click on “Action” button > “Particle Module” tool
2. Choose your project in the “Particle Project” field
3. Click on the “Apply filters” button to select the samples of your project
4. Zoom in the map to check their positions

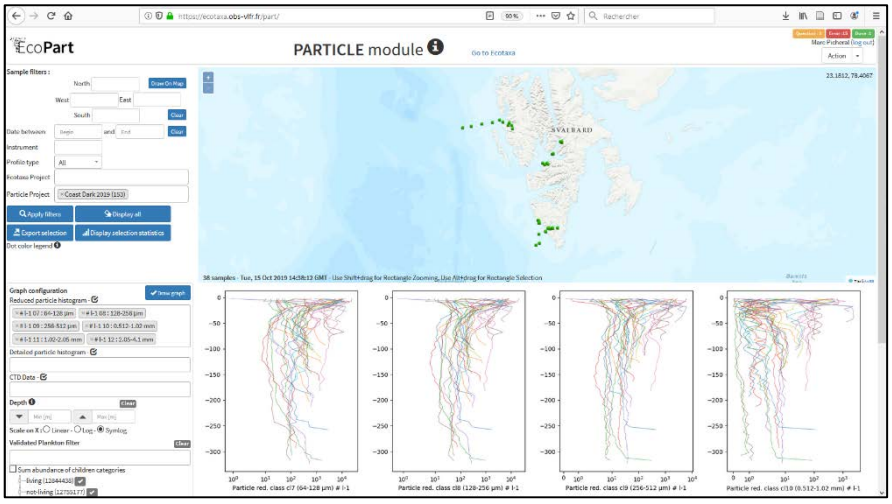
<u>Procedure to correct the positions :</u>

We do recommend that you correct the positions in the project using UVPapp and then import the metadata again instead of correcting these values in the sample editor of EcoPart.

1. Use the Edit Sample tool in UVPapp and check/correct the LAT/LON using the information from the datashets or the automatically recorded positions from the CTD files.
2. Re-import the header file from the meta folder of the project (via FTP if necessary)
3. Redo the step ③ to read the updated metadata
4. Re-import samples selecting the “Import metadata only” option

2.8 Quality Check : Large Particulate Data

It is recommended to visualize the vertical profiles of particle abundance and biovolumes in EcoPart to check that all profiles are coherent.



2.9 Import images

After you completed the import of the particle profiles, you can import the images in the EcoTAXA project that was automatically created along with the particle project. You will provide the permissions to the EcoPART project by inviting annotators in this EcoTAXA project.

IMPORTANT WARNING :

You must **select the project folder in EcoTAXA** and not the individual ZIP archives of each sample from the ecodata folder of the project.