

ECOTAXA

IMPORTING Underwater Vision Profiler (UVP6) data into

THE PARTICLE module of ECOTAXA

Quantitative Imaging Platform of Villefranche sur Mer (PIQv)

Elineau & Picheral

[illegible]

Summary

1	Preliminary verification using UVPapp.....	2
2	General procedure	2
2.1	General information	2
2.2	Load project into the Ecotaxa FTP depository.....	3
2.3	Ecotaxa Importing steps	3
2.3.1	Standard procedure	3
2.3.2	Procedure for project whichi images are already imported in Ecotaxa	3
2.4	Project creation in EcoPart	4
2.5	Import sample	5
2.6	Quality Check : Images start & last for Depth profiles (samples)	5
2.7	Verification of positions of the samples.....	7
2.8	Quality Check : Large Particulate Data	9
2.9	Import images.....	9

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 metadata sections before processing.

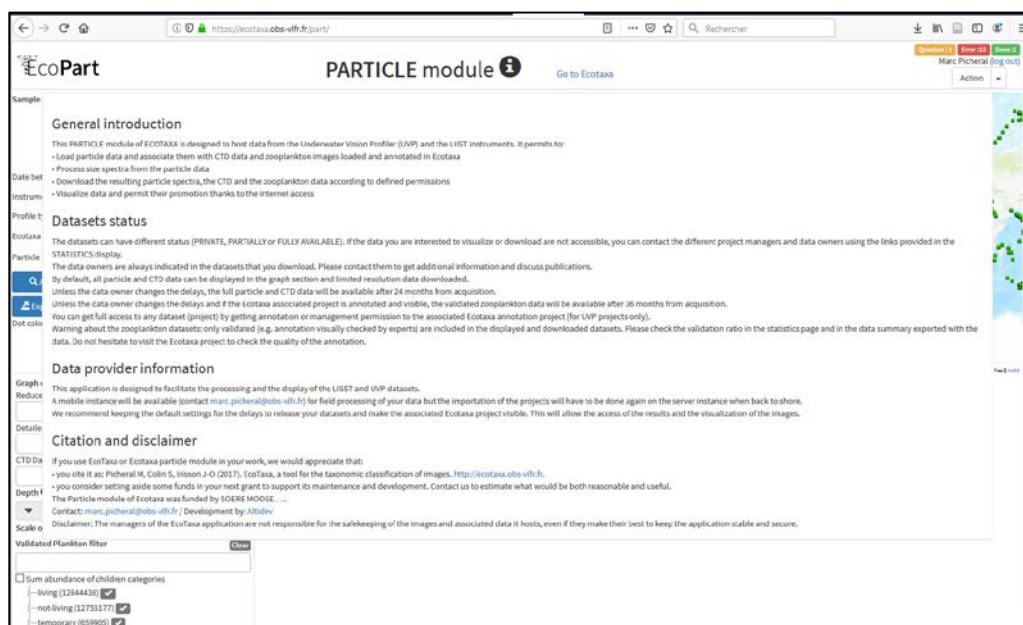
The Project metadata must be documented before you import the data in EcoPart.

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 copying 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 you press “Read metadata” :

The screenshot shows the 'DATA organization' form for creating a new particle project. The form is divided into several sections with various input fields and buttons. Numbered annotations (1-7) point to specific elements:

- ①: Information icon for 'DATA organization'.
- ②: 'Particle Project title' field containing 'Test Project UVP5 sn200'.
- ③: 'Read Metadata' button.
- ④: 'Root folder' dropdown menu showing 'local_plankton/uvp/uvp_b/uvp5_sn200_perle_02_2019'.
- ⑤: 'Project Owner' dropdown menu showing 'Amanda Elineau'.
- ⑥: 'Privacy delay' field set to '2' months.
- ⑦: 'Save' button (green) and 'Cancel' button (orange).

The form includes the following fields and values:

Field	Value
Particle Project title	Test Project UVP5 sn200
Root folder	local_plankton/uvp/uvp_b/uvp5_sn200_perle_02_2019
Project Owner	Amanda Elineau
Ecotaxa Project	
Instrument type	uvp5
Operator name	nagib bhairy
Chief scientist name	xavier durrieu de madro
Data owner name	xavier durrieu de madro
Project acronym	perle
Cruise	sn200_perle_02_2019
default instrum SN	sn200
Operator email	nagib.bhairy@mio.osup
Chief scientist email	demadron@univ-perp.fr
Data owner email	demadron@univ-perp.fr
Default depth offset	1.2
Ship	pourquoi_pas
Privacy delay	2 Months
General download delay	24 Months
Plankton annotation download delay	36 Months

Additional text: 'The delay starting date is the date of the older sample of the project. See the sample metadata page to visualize resulting display/download dates'.


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



Particle Project 1576: Project test
Particle Module Home

Question 15
Enter 15
Items 15

Marc Picheral (log out)

Action

Particle Project 128: Project test

Import sample from disk

Edit project metadata

Back to project list

Oldest sample date is 2018-12-17, Visibility date is 2019-02-17, Particule export date is 2020-12-17, Zooplankton classification export date is 2021-12-17

Project samples dashboard

Showing 1 to 5 of 5 entries

Action:

☐ Compute detailed histogram
☐ Compute reduced histogram
☐ Match Ecotaxa sample
☐ Compute taxonomy histogram
☐ CTD Import

Start operation

Select all samples

Remove useless tool samples

SHOW IMPORTATION RESULT GRAPH: Page 1

Select	ID	profile	filename	station ID	first Image	last Image	last Image used	Descent Filtered Rows	Removed empty slice	Sample Date	Raw Part. Histo	Det Part. Histo	Reduced Part. Histo	Ecotaxa Sample ID	Taxonomy Histo	Taxonomy Recalc Date	CTD Data	CTD Import Date	comment
<input type="checkbox"/>	18613	cast_af	20181217101835	pointb	632	999999	8985	342		2018-12-17	True	54	54		0		0		no
<input type="checkbox"/>	18612	cast_ae	20181217095521	pointb	578	999999	8676	589		2018-12-17	True	53	53		0		0		no
<input type="checkbox"/>	18611	cast_ac	20181217092508	pointb	28	999999	2154	181		2018-12-17	True	14	14		0		0		no
<input type="checkbox"/>	18610	cast_ab	20181217090629	pointb	27	999999	7813	565		2018-12-17	True	51	51		0		0		no
<input type="checkbox"/>	18609	cast_aa	20181217083418	pointb	563	999999	9430	694		2018-12-17	True	54	54		0		0		no

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 »

<input type="checkbox"/>		20066	perle2_001	20190227084727	01	1
--------------------------	--	-------	------------	----------------	----	---

Showing 1 to 31 of 31 entries

Action : ☐ Compute detailed histogram ☐ Compute reduced histogram ☐ Match Ecotaxa sample ☐ Compute taxonomy histogram ☐ CTD Import

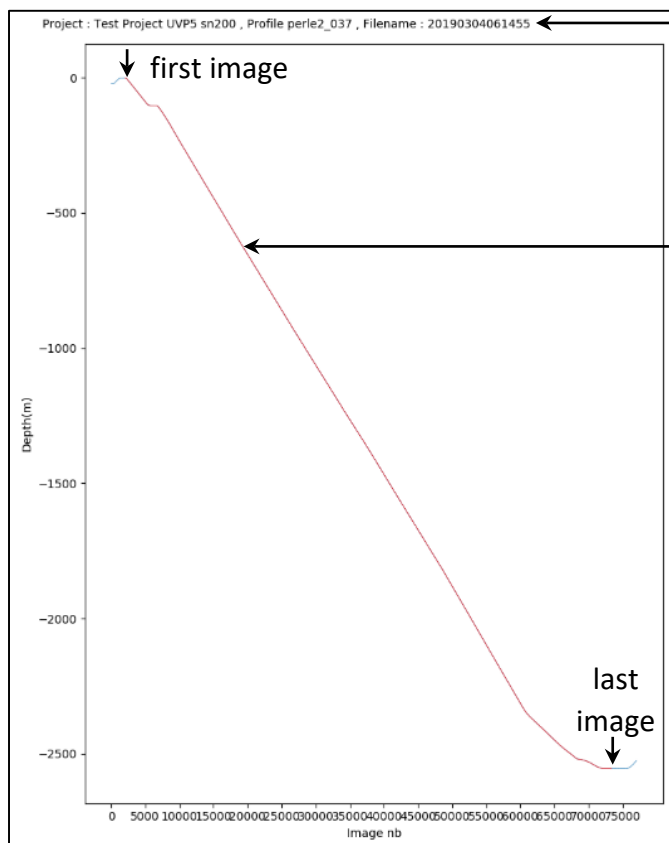
Start operation

Select all samples

Remove selected samples

SHOW IMPORTATION RESULT GRAPH : Page 1

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

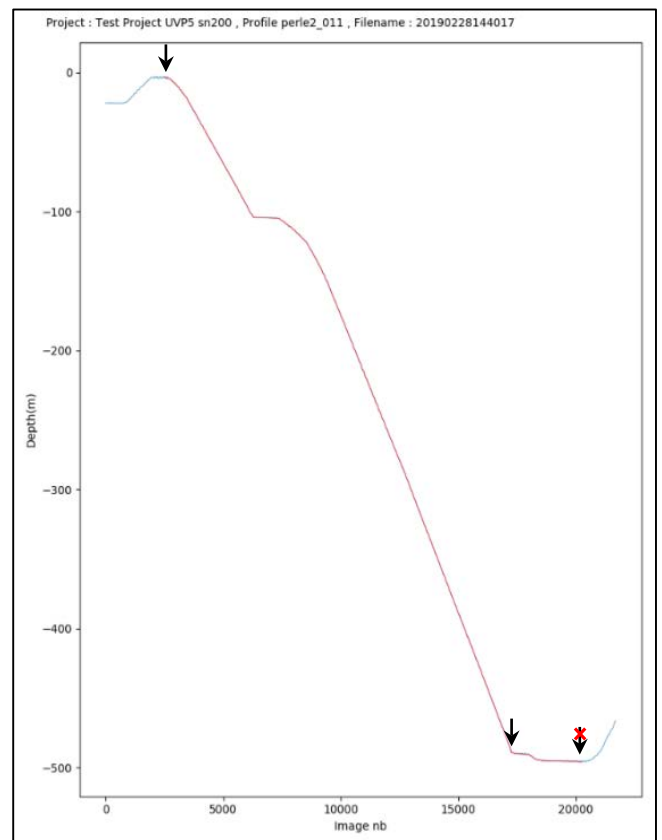


The name of your cast from the raw folder

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

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



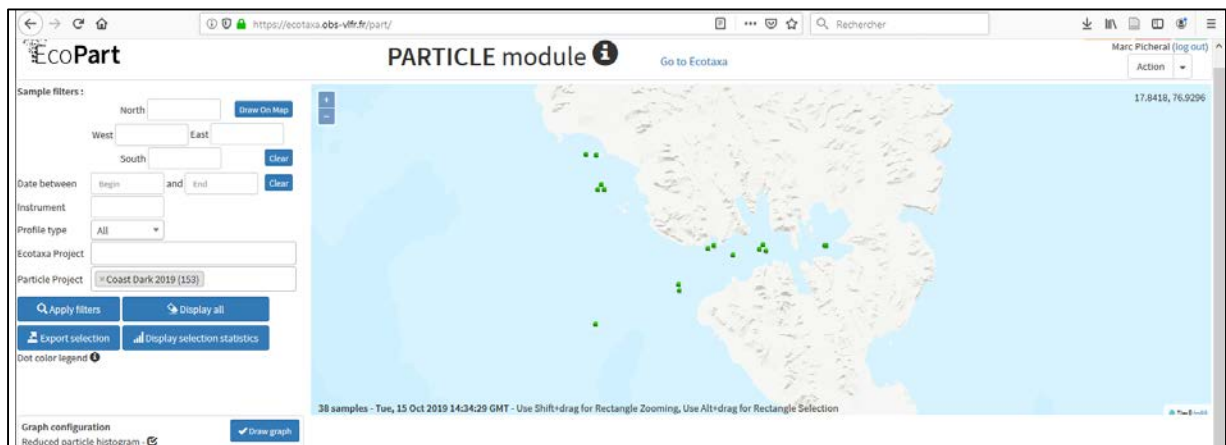
Procedure to modify the range of images:

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 *_Particle.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 useful to check that the samples (profiles) are correctly positioned on the map.

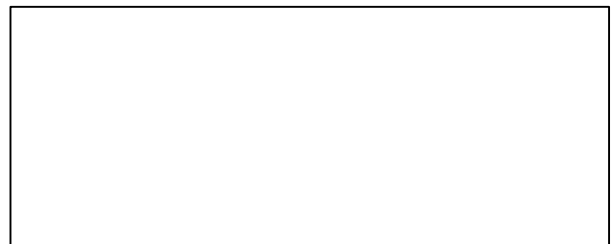


1. On the Ecotaxa home page, click on “Action” button > “Particle Module” tool
2. Choose your project in the “Particle Project” field
3. Click on the “Apply filters” button to select the samples of your project
4. Zoom in the map to check their positions

Procedure to correct the positions :

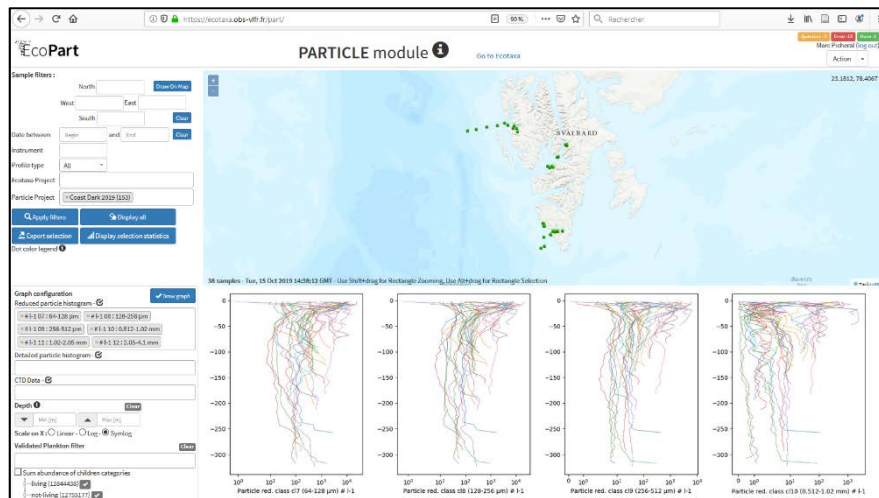
We do recommend that you correct the positions in the project using UVPapp and then import the metadata again instead of correcting these values in the sample editor of EcoPart.

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.