R.2424 - Release Notes

Deployment June 12, 2024

Summary

MAIN TOPICS	MODULE
Import image calibrated metadata - LINK	Data Studio
Annotations improvements - LINK	Data Studio
Annotation Explorer improvements - LINK	Data Studio
Analytics - Point Cloud Difference - LINK	Data Studio
UX/UI Improvements - LINK	Data Acquisition
UX/UI Improvements - LINK	Digital Inspection
Attributes edition - LINK	Infield mobile app
UX/UI Improvements - LINK	Data Flow
Other Upgrades - LINK	All
Solved issues - LINK	All
What's Next? - LINK	All

Data Studio - Import image calibrated metadata

CONTEXT

Use case: Import image-calibrated metadata from off-platform photogrammetry into Aether.

Target Audience: Users importing images and related metadata into Aether

PROBLEM SOLVED

In the last release, new functionalities have been developed on the 3D viewer:

- Proximity filter
- Projection of annotations between 3D and images

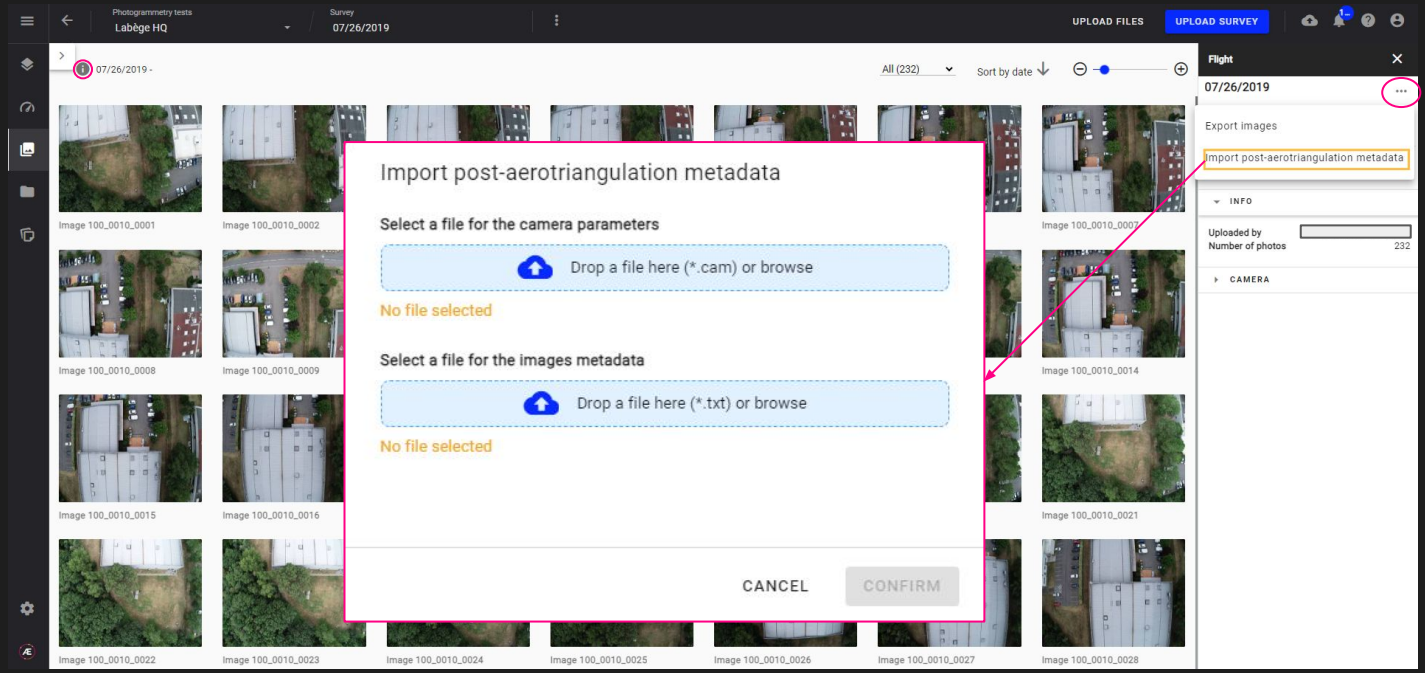
However, these functionalities can't work if image metadata are not calibrated.

Today, image calibrated metadata are automatically processed by the platform for automatic photogrammetry process only.

With this feature, users will have the ability to upload image calibrated metadata when photogrammetry has been done manually off-platform.

Data Studio| Import image calibrated metadata

In the “Image gallery”, you can import post aerotriangulation metadata:
internal camera parameters and external camera parameters (position/rotation)



Data Studio - Annotations improvements

CONTEXT

Use case: Qualify issues during an asset inspection.

Target Audience: Users performing asset inspections

PROBLEM SOLVED

Previously, we had limited ways to qualify annotations.

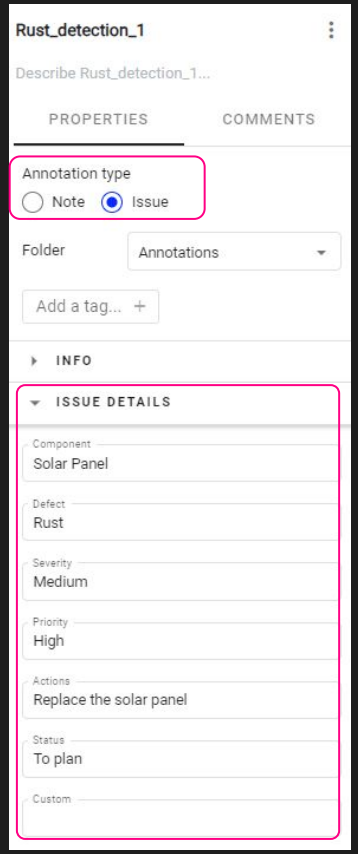
This new feature will enable the user to characterize an annotation as “note” (like today) or “issue”.

For “issues”, the user can complete the description of the annotation with some attributes, such as : Component, Defect, Severity, Priority, Actions, Status and Custom.

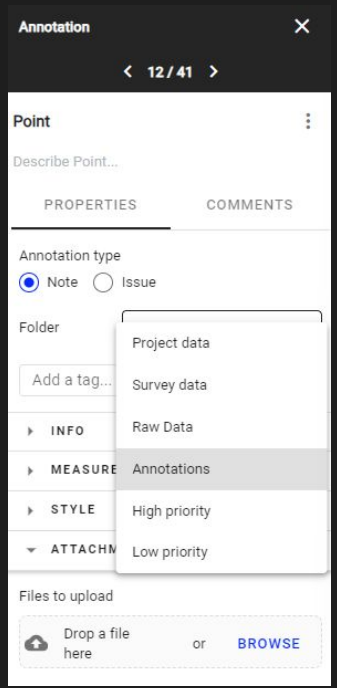
In addition, to make it easier to group annotations, the user will be able to select the "annotation folder" in which to place the annotation.

Data Studio | Annotations improvements

To qualify an issue, select the “issue” annotation type, and the “issue details” panel will open to enter all the attributes.



Change an annotation from one folder to another :



Data Studio - Annotation Explorer improvements

CONTEXT

Use case: The annotation explorer provides a global view of all annotations in a project and allows to perform bulk actions on annotations.

Target Audience: Any users managing annotations

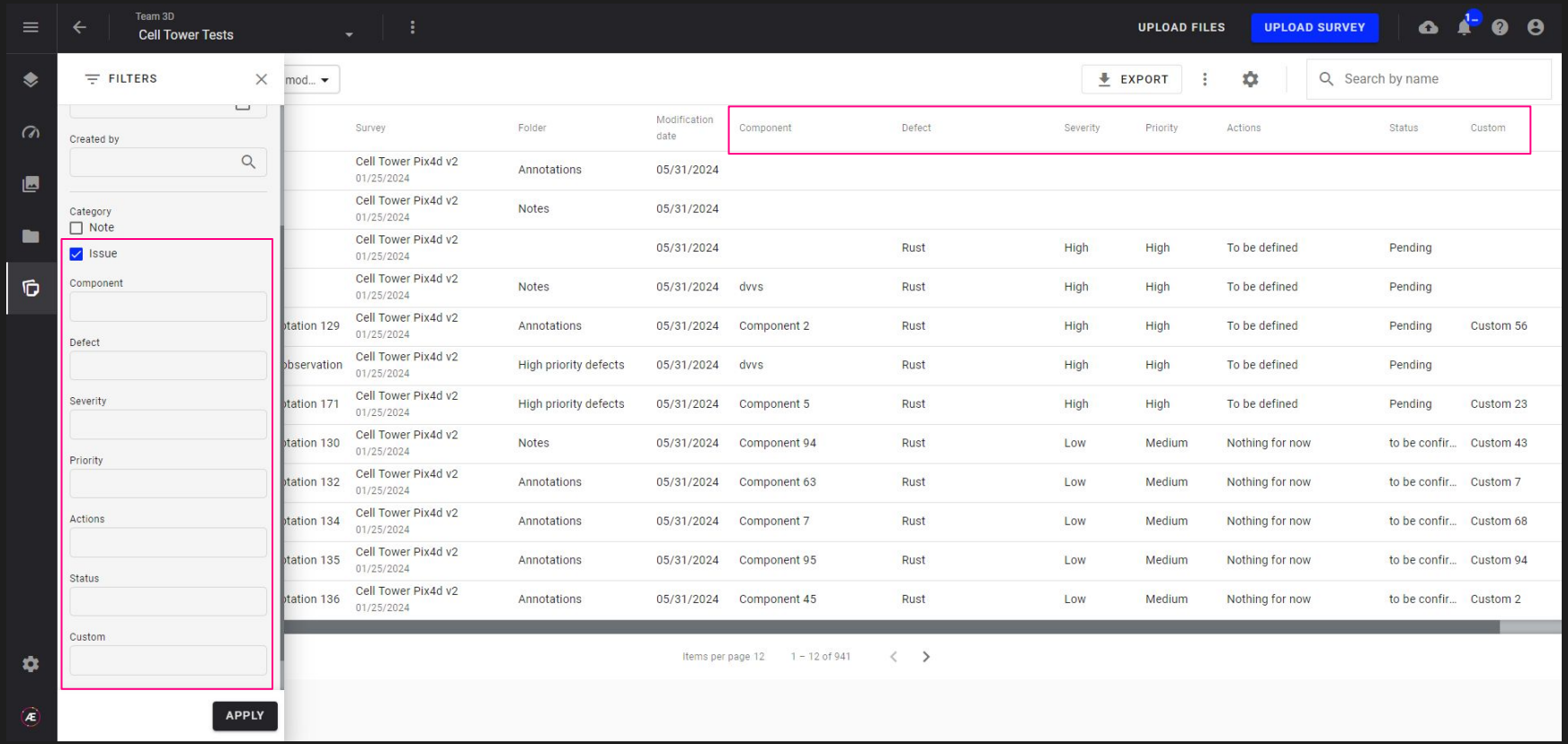
PROBLEM SOLVED

The following improvements have been made on the annotation explorer :

- Addition of new filters to filter on annotation type and on issue attributes
- Addition of columns to visualize all the issue attributes in a table
- Possibility to update issue attributes in “bulk”, selecting a list of issues.
- Possibility to change annotations from one group to another in “bulk”, selecting a list of issues.

Data Studio | Annotations Explorer improvements

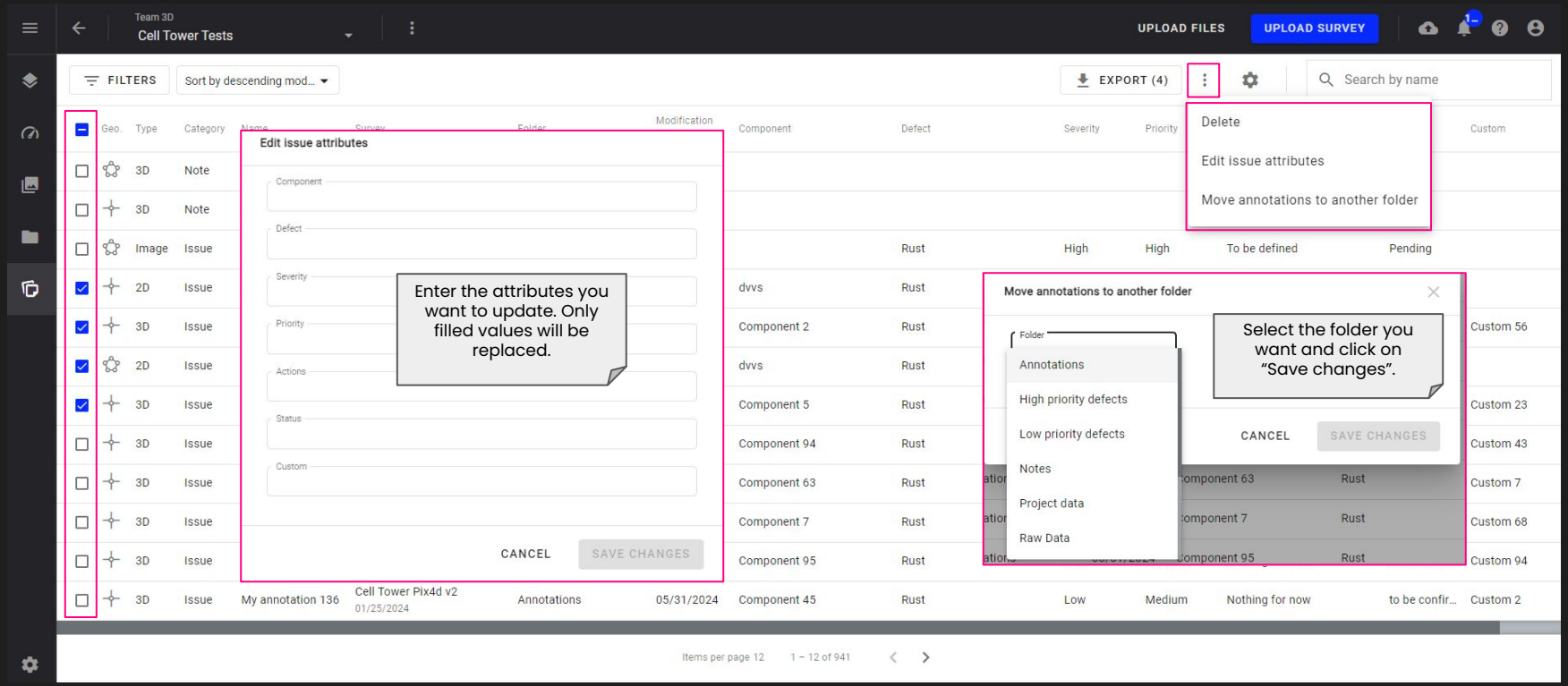
In the “Annotation explorer”, you can visualize issue attribute information and filter on these attributes.



Link to kb

Data Studio | Annotations Explorer improvements

New bulk actions are now available to facilitate the categorization of annotations: one to move annotations from one folder to another, and one to edit issue attributes.



Analytics - Point Cloud Difference

CONTEXT

Use case: Identify changes between 2 scenes (point clouds), e.g., the deformation of a ship between two maintenance campaigns.

Target Audience: any users involved in asset maintenance operations

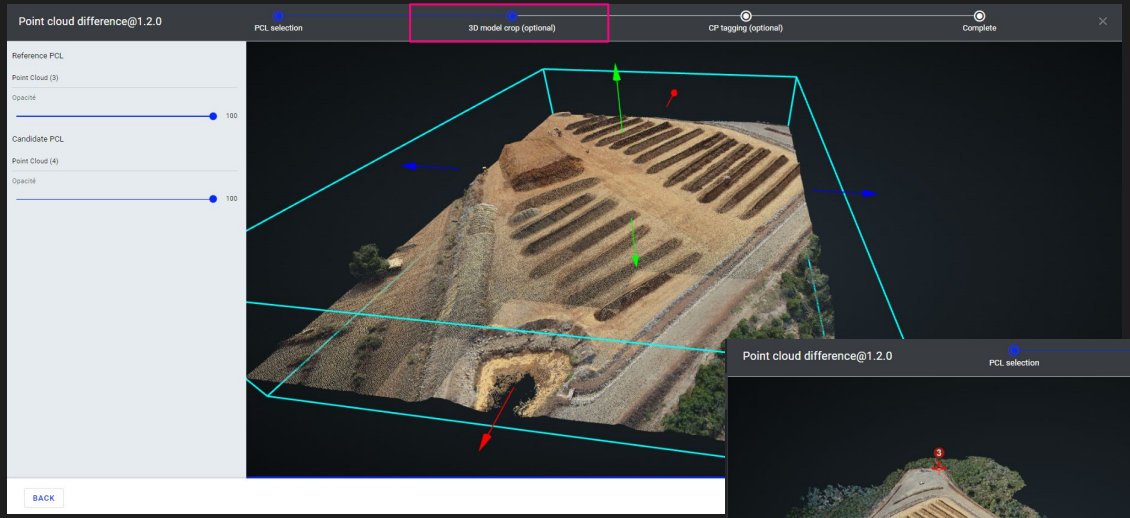
PROBLEM SOLVED

The improvements made are the following :

- Possibility to launch analytic on a specific zone of the asset (and not necessarily the full asset)
- Possibility to define “control points” to locally adjust the coregistration of the 2 point clouds.
- Visualization of outputs: “normalized difference” displayed by default, with the possibility to change the default colour ramp.

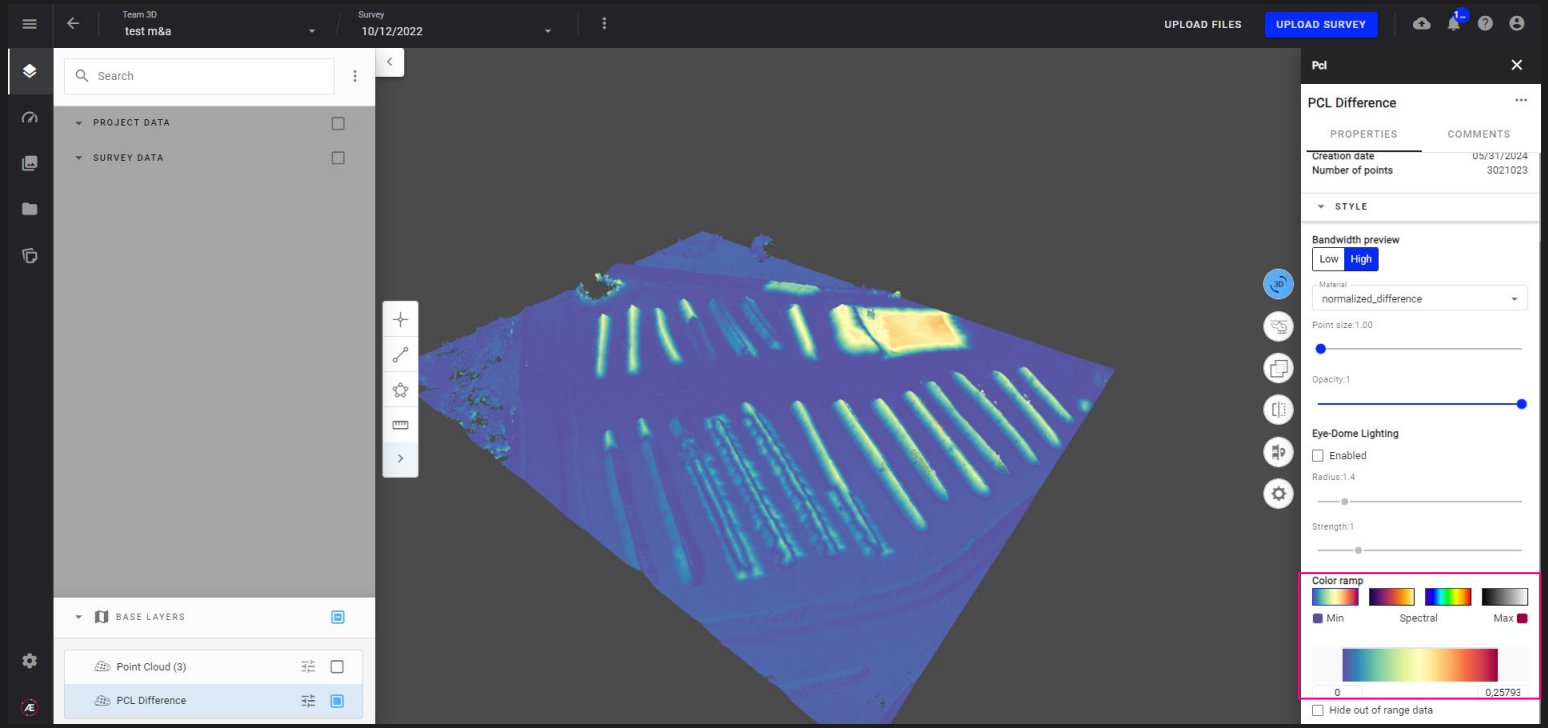
Analytics | Point cloud difference

2 new steps: define the “crop” zone and the control points.



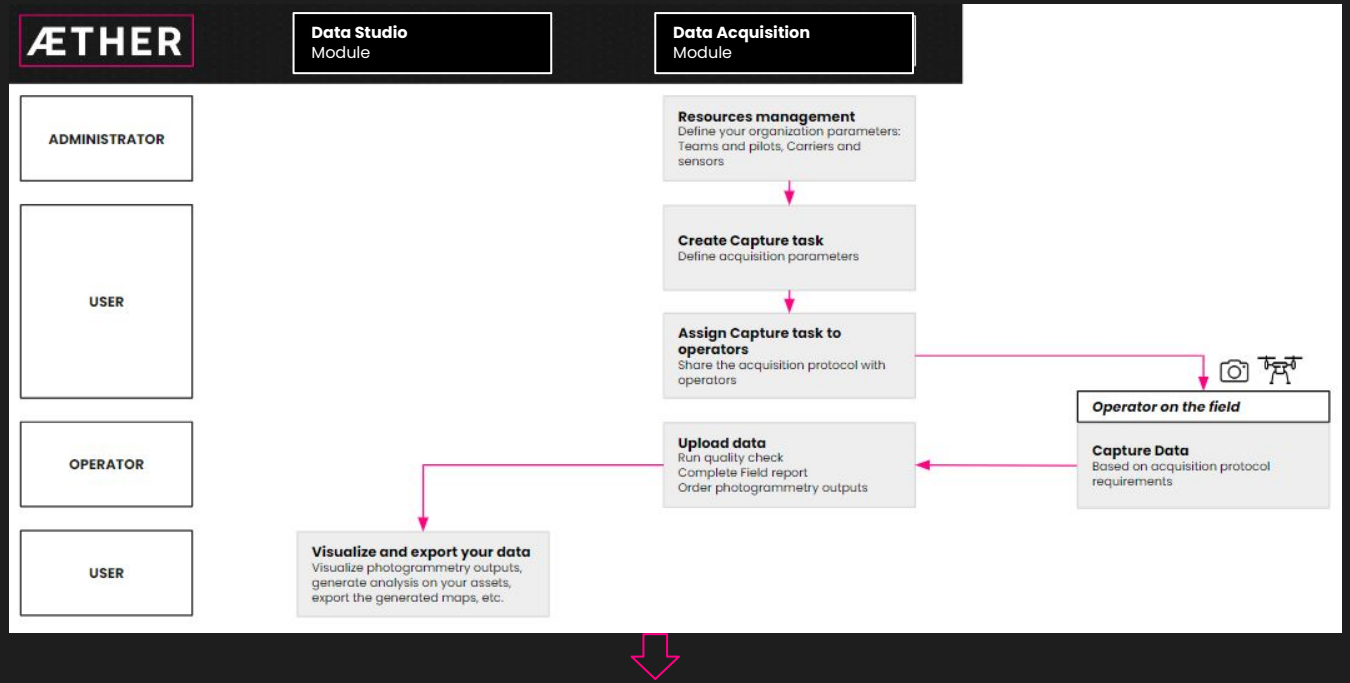
Analytics | Point cloud difference

The “PCL difference” output layer can be filtered to display only a certain level of deformation.



Data Acquisition - UX/UI Improvements

The **Data Acquisition** module allows to **organize pilots and teams of pilots**, **create and assign tasks to pilots**, **upload and QC data acquired on field**, **complete tasks** to trigger invoicing process.



Vegetation detection can be launched manually from the Analytics catalog

Data Acquisition - UX/UI Improvements

CONTEXT

Use case:

- **Bulk capture tasks** management
- **LiDAR** capture tasks management
- Capture task **activity monitoring**

Target Customers: All users having access to Data Acquisition module

PROBLEM SOLVED

Before the release:

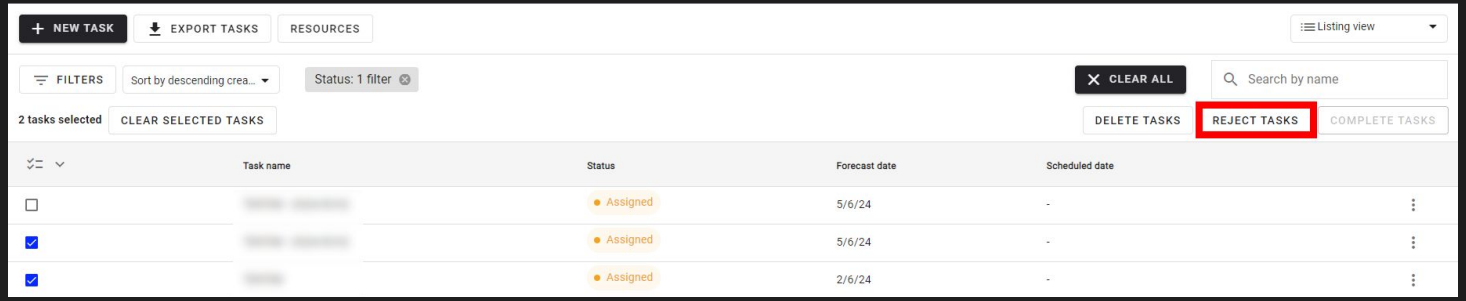
- Actions on capture tasks were performed individually (time consuming)
- No specific LiDAR workflow for this type of acquisition (only workarounds)
- No specific metrics to validate the completion of the tasks or order new acquisitions

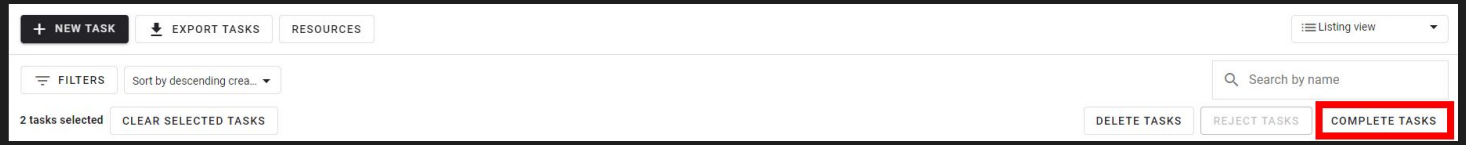
After the release

- Bulk actions can be done from the listing view
- Capture tasks based on LiDAR can be created
- Extraction of data coverage metrics when LiDAR data footprint and mission area are available

Data Acquisition | Bulk actions on capture tasks

Bulk actions on a selection of capture tasks (delete, reject, complete, export)

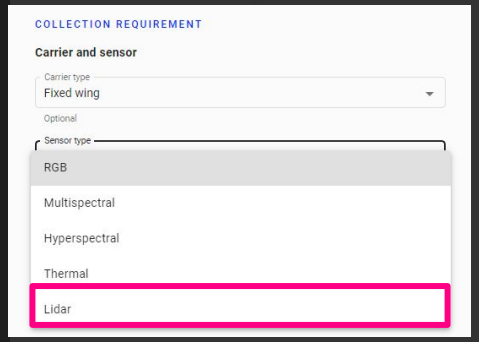


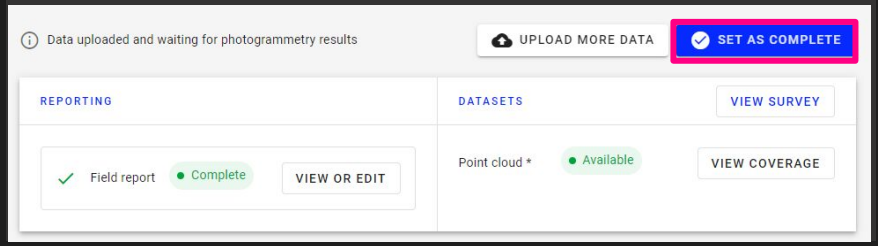


Data Acquisition - UX/UI Improvements

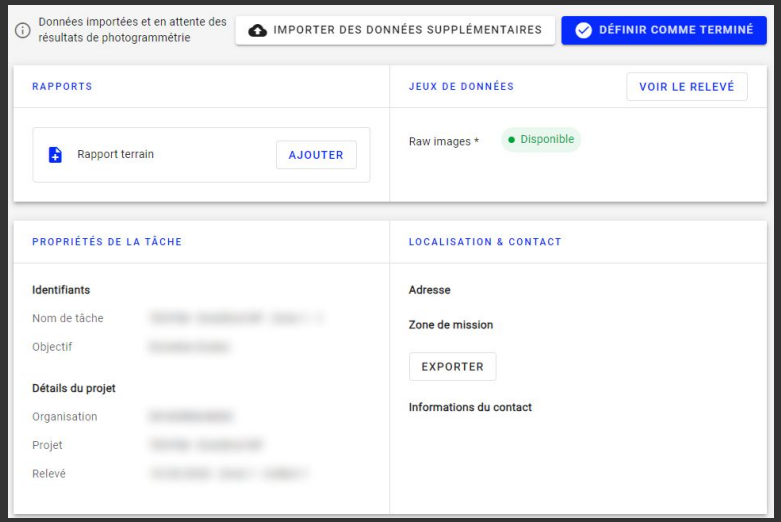
Complete Lidar tasks

It is now possible to create tasks of type LiDAR and to follow the complete workflow



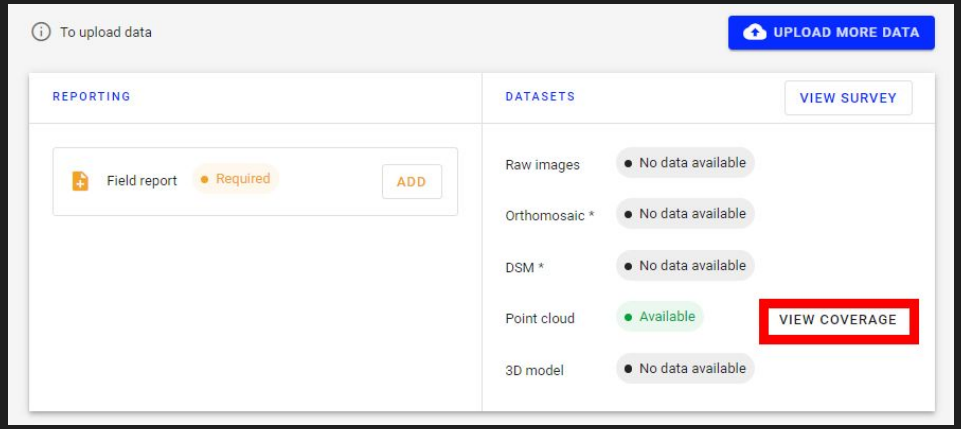


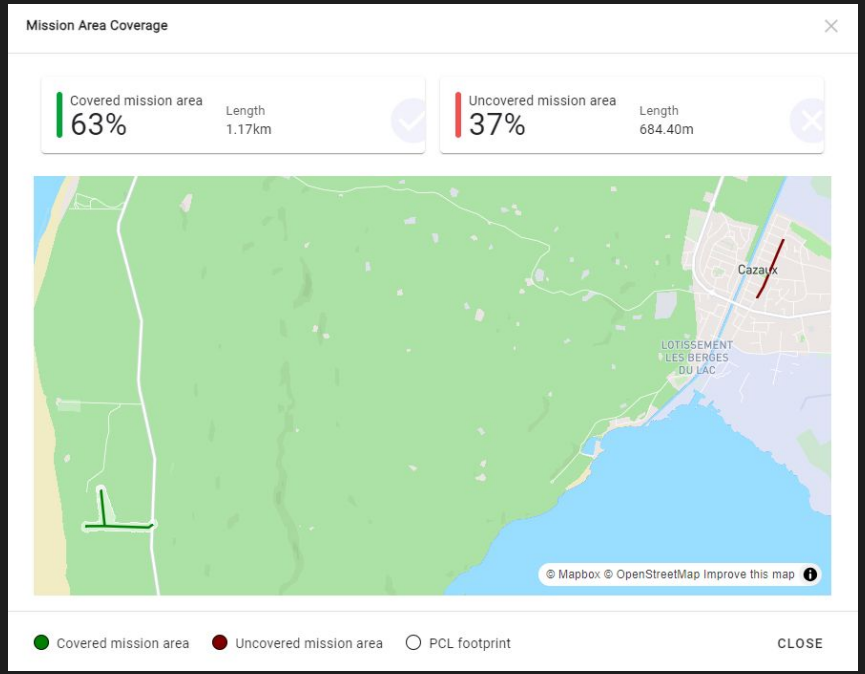
Module is translation-ready



Data Acquisition | Point cloud coverage metrics

Display metrics on the task completeness (for imported point cloud)





Digital Inspection - UX/UI Improvements

CONTEXT

Use case:

- Improve User experience for GIS specialists

Target Customers: Digital Inspection module users

PROBLEM SOLVED

The following improvements have been made:

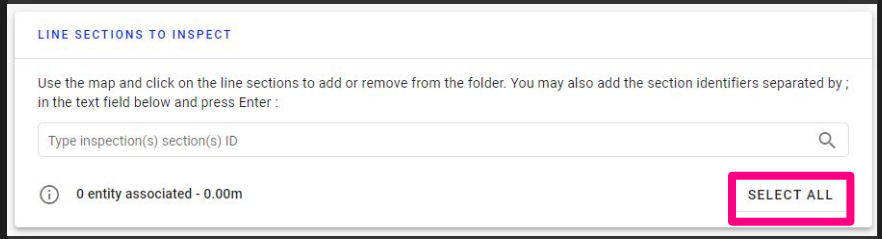
- New button to select all sections from the substation feeder
- Each zone is represented by a dedicated color from the folder details page
- The applicable GIS version is displayed directly on the folder creation form
- An informative pop-up is displayed when creating a zone from a folder based on an outdated GIS version
- The outdated GIS versions are indicated

The content of global report and Excel anomaly report, is updated for users

Digital Inspection - UX/UI Improvements

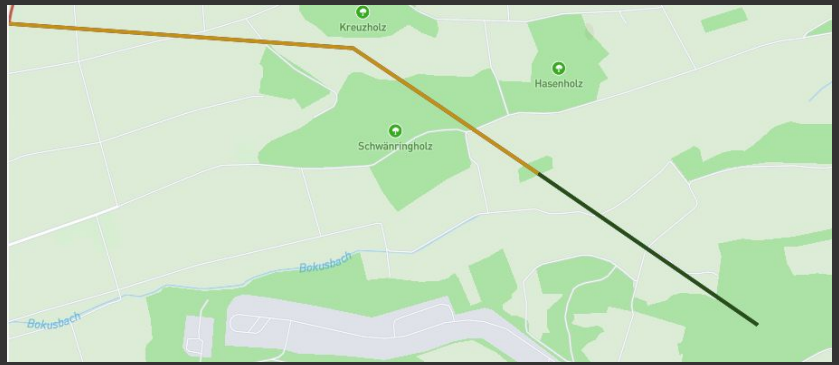
Select all sections from the station feeder

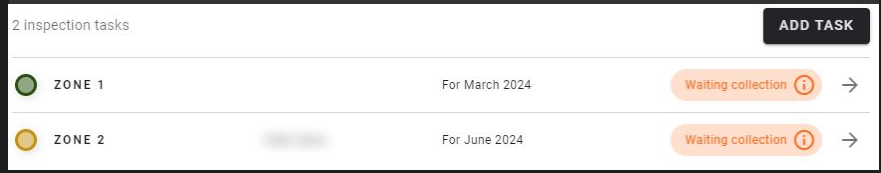
It is now possible by one-click, to select all sections from the station, when creating a folder or a zone



Better distinction of zones from the folder page

Each zone is represented by a dedicated color from the folder details page

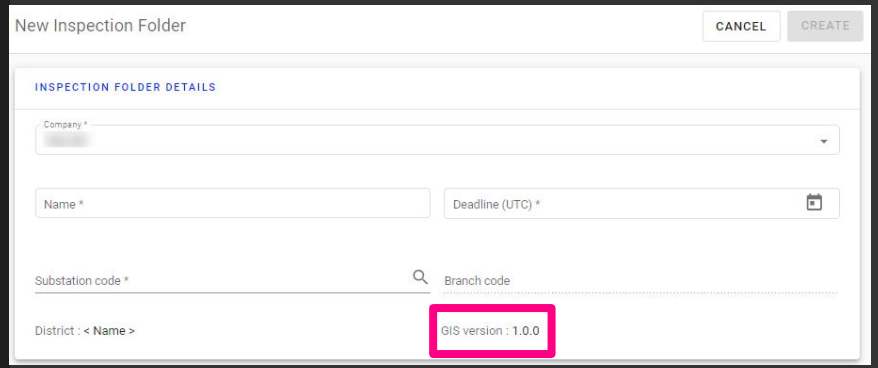




Digital Inspection - UX/UI Improvements

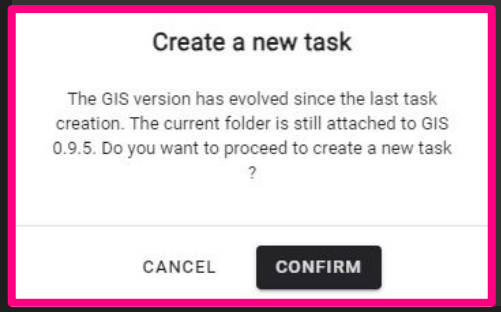
Applicable GIS version in the folder creation form

The GIS version is displayed directly on the folder creation form



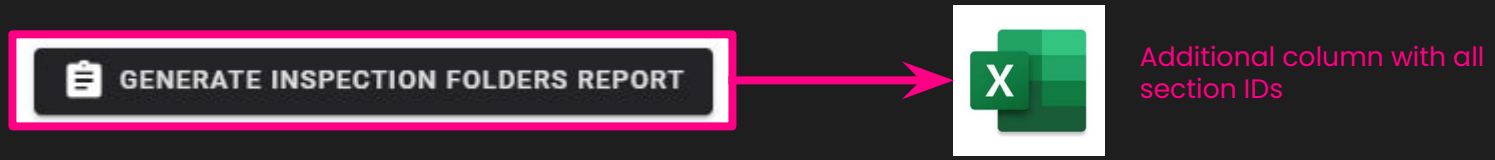
Improved information about outdated GIS versions

Outdated GIS version are better indicated



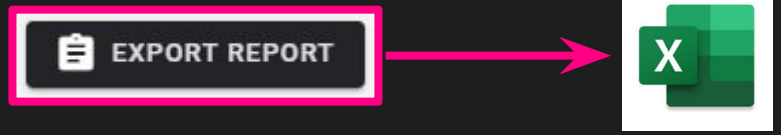
Digital Inspection | Enriched reports

The Global folder/zones report now references the list of all sections IDs for each created folder



Additional column with all section IDs

The anomaly report at zone level now contains a new sheet with properties named as per the client anomaly reference



Additional sheet with properties from the client anomaly reference

Infield app - Attributes edition

CONTEXT

Use case:
Asset Inspection: report measures, observations, quality checks directly based on the asset designs (ex: construction designs, solar panel designs…)

Agriculture: report field observations or microplot level measurements

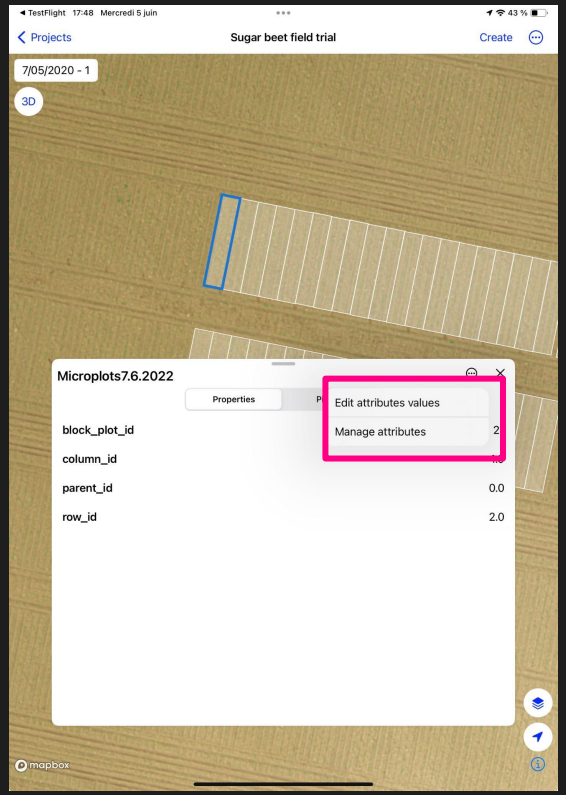
Target Audience: Operators, technicians involved in asset or, agricultural field inspection

PROBLEM SOLVED

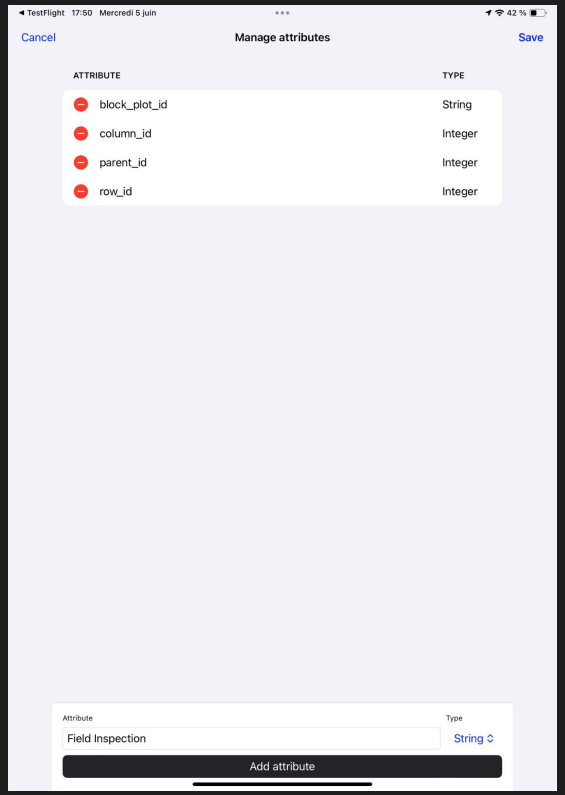
Infield users can now report any infield information to Aether based on existing designs. It includes the creation of attributes and addition of custom values from the field.

Infield app | Attributes edition

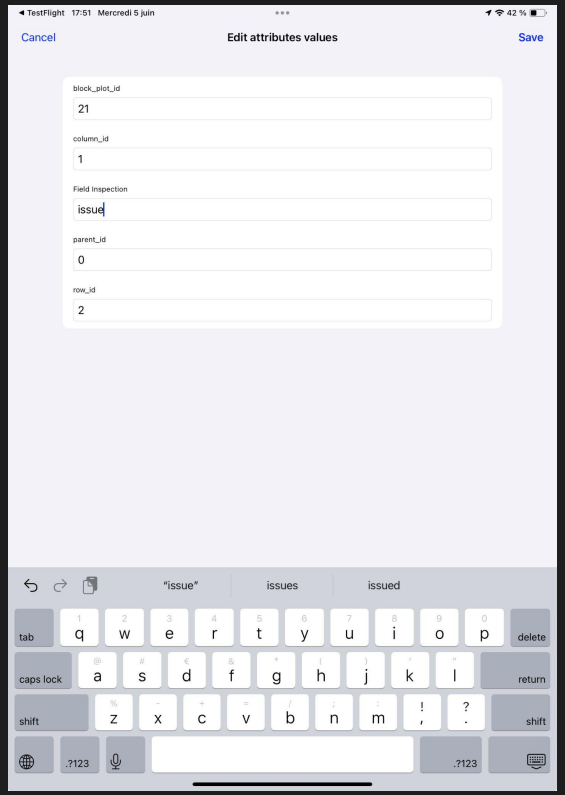
Edit vector information



Manage attributes



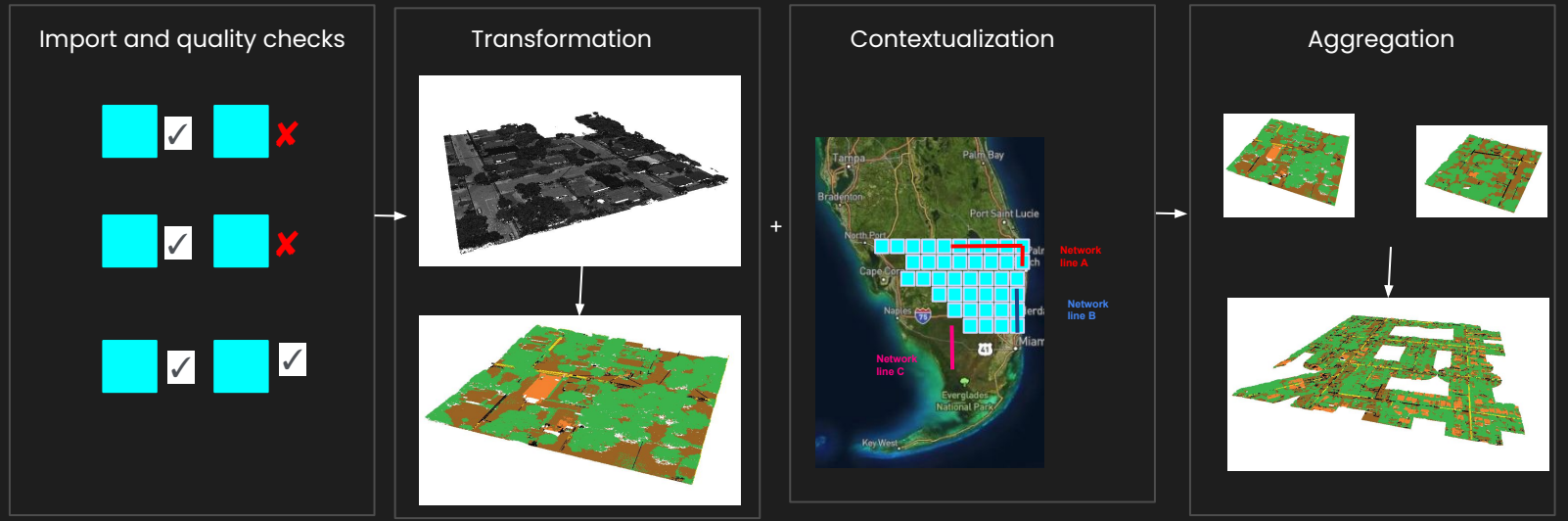
Edit attribute values



Data Flow - UX/UI Improvements

The **Data Flow** module allows us to **import**, **quality check**, **transform**, **contextualize**, **aggregate** large volumes of files.

It might be a prerequisite before to launch the vegetation detection analysis around power lines



Import and quality check data

Identify the vegetation, the ground, the network ...

Link the imported files to user assets

Aggregate the data for **visualization**

Vegetation detection can be launched in the analysis management Module

Data Flow - UX/UI Improvements

CONTEXT

Use case:

- Real time visibility on the progress of the data streams (ensure SLA compliance)
- Easily pinpoint areas where delays or errors occur and take proactive measures to address them

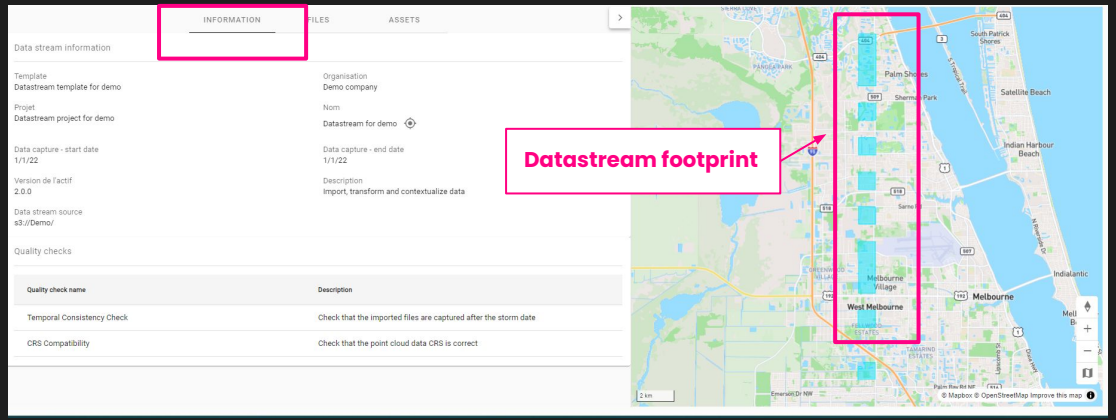
Target Audience : All dataflow users

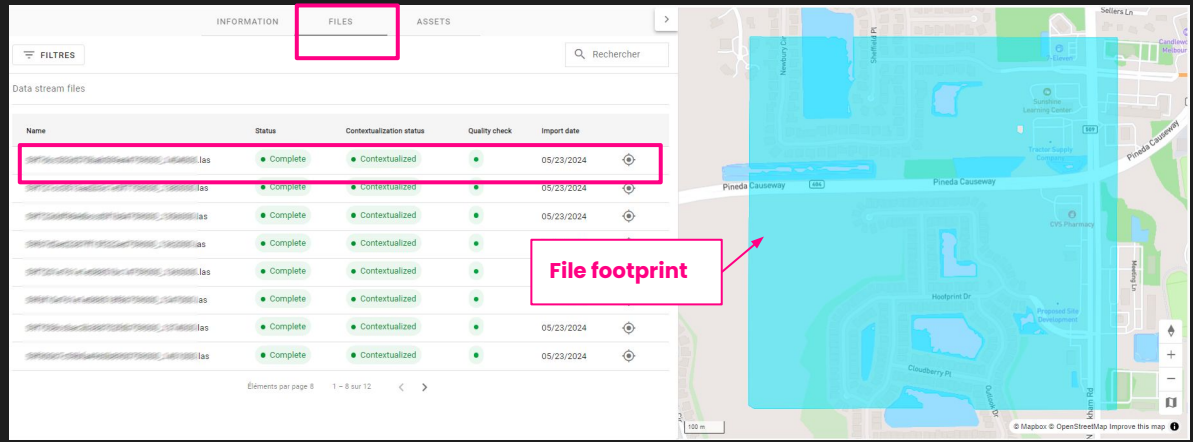
PROBLEM SOLVED

- How might we allow users to **effortlessly locate their ingested data**?
- How might we empower users to **pinpoint problematic data** for correction and operational optimization?
- How might we enable users to **analyze the quality checks** applied to their data and their results?
- How might we enable users to determine if their data is **ready** for further analysis and **field operations** ?

Data Flow | Visualize datastream, files and asset footprints on a map

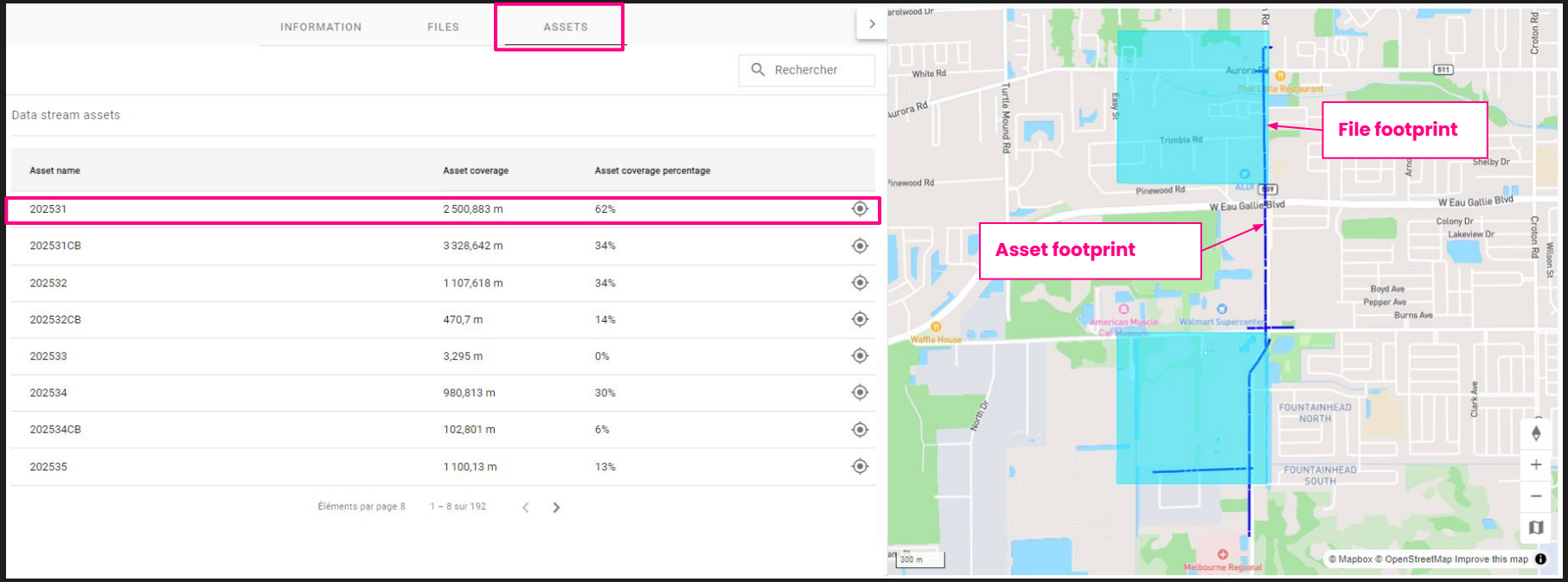
Visualize **datastream**, **files** and **asset** footprint on the map to view their location and identify areas where delays or errors occur





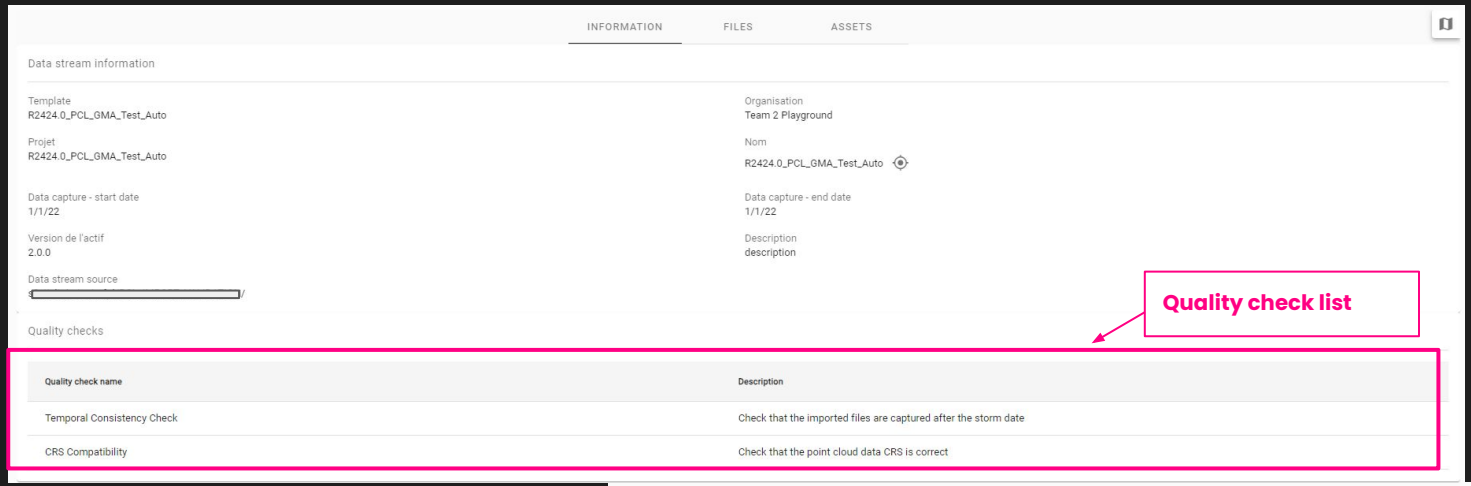
Data Flow | Visualize datastream, files and asset footprints on a map

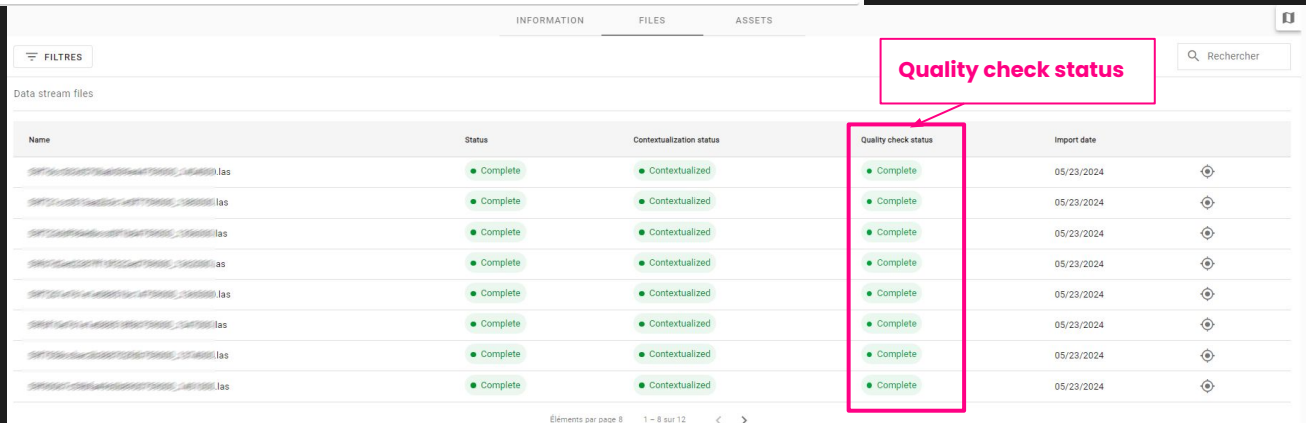
Visualize **datastream**, **files** and **asset** footprint on the map to view their location and identify areas where delays or errors occur



Data Flow | Quality checks monitoring

List the available quality checks for a given data stream and display quality check status per file





Data Flow - UX/UI Improvements

CURRENT LIMITATIONS

- Only the status of the quality checks are displayed (no details about the type of quality check are provided yet)

NEXT STEPS

- **Map views:** Overlay file footprints and assets to help identify files with issues
- **Quality checks:**
  - detail of quality checks by files
  - Improved filters

DEPLOYMENT

- **Map views with footprints:** available to all users who have access to the Data Flow module
- **Quality checks:** quality check shall be first configured for the data stream template of interest.

Other upgrades

Data Studio - Split view 3D / Images Image location display

Split view 3D/Images gallery :

- Image locations layer is no longer displayed by default when opening split view.
- However, the image locations are automatically displayed when the proximity filter is activated.

Data Studio - 3D Manage large volumes of annotations

For surveys with more than 200 polygon annotations, annotations are displayed as “points” to simplify the display.

Polygons can be displayed by clicking on the “points”.

Possibility to display several polygons quickly with “MAJ” + hovering mouse over points.

Data Studio - Stockpiles module

In the newly generated reports, 3 volumes metrics will be available: cut, fill and net volumes

Solved issues

MAIN TOPICS	MODULE
Fixed - “Clearance to Wire” attribute was missing in attribute table	Insight
Fixed - Shared url 2D didn’t redirect to Insight correctly in SSO context	Insight
Fixed - Chromium issue (cf following slides)	Operations

What's Next? 

Next release : R2431 scheduled on 30-July-2024

- Analysis module - Clearance report alerting
- Insight - Enable to visualize platform external vector tiles: arcgis feature server, PM Tiles
- Data Acquisition - Display metrics on the task completeness for all deliverables
- Data Acquisition - Addition of coverage metrics to CSV export
- Data Acquisition - Additional flight parameters for RGB
- Data Acquisition - Submit field report from a LiDAR tasks
- Data Flow - Data stream monitoring improvement

Alteia.com

SUPPORT
support@alteia.com

PRESS INQUIRY
press@alteia.com

JOB OPPORTUNITIES
hr@alteia.com

EVERYTHING ELSE
contact@alteia.com

Our clients

WORLD BANK GROUP
eramet
FPL
voltalia
AGNICO EAGLE
EUROVIA VINCI
أرامكو السعودية saudi aramco
suez
ENEDIS L'ELECTRICITE EN RESEAU
CEMEX
Stantec
BASF We create chemistry
VEOLIA
syngenta