Document information

Document: Release notes MapEO
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Impact release on running operational processes: NONE

MAPEO Download Tool

2023.02.01: Visual map selection for 'download' product types (lidar, photogrammetric).
Users of the product types (lidar, photogrammetric) can now use a visual map selection via the MAPEO Download Tool to download data selections.

MAPEO Field Software

New MAPEO field software release can be found here: https://support.mapeo.be/hc/en-us/articles/5146809158940-MAPEO-Field-Software

2023.02.02: Change warnings to critical stoppers for specific quality parameters:
Following quality parameters moved from warning to critical stopper. In case the thresholds are not met, the user will not be able to upload the data. He is advised to fix the issue before reuploading the mission.

- all bands of a calibration image must be present
- image overlap in ROI is higher than the configured value (5)
- GCP overlap is higher than the configured value (5)

2023.02.03: New functionality added which dynamically checks amount of GCPs in function of image (RTK) accuracy
MAPEO supports both RTK and non-RTK missions. According to our procedures we require 6 GCPs for non-RTK missions and 2 GCPs for RTK missions. The new functionality looks at the image coordinate accuracies stored in the EXIF and defines an RTK mission in case >95% of the images have an XYaccuracy <3cm. In that case a mission is only required to have 2 GCPs defined. In case no accuracy information is stored in the EXIF of the images or the amount of images with XYaccuracy <3cm is lower than 95%, the mission is defined as non-RTK and 6 GCPs are required

2023.02.04: use forward/side overlap requirement of drone mission spec of order (if available) instead of mission profile
From this release onwards the forward/side overlap requirements stored in the drone mission specification of the order is used as basis for the overlap quality check. This used to be a parameter which was set in the mission profile.

2023.02.05: Support Mavic 3M
The new Mavic 3M is now supported as a sensor for multispectral drone missions/products. For pilots using the Mavic 3M can select the "Mavic3M-MSPchannel" when uploading their data.

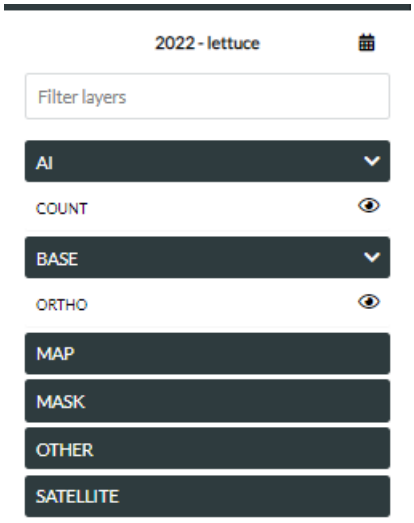
2023.02.06 Collection of Field Software Bug fixes:

- Download popup: tree loads faster
- Visualization of overlap layer: now black where no image coverage inside ROI
- Use median date of images as default mission date instead of oldest one (fixes issue with bad 1980 dates)
- Fix slow start of upload
- Fix rendering issues with fast mouse wheel scroll zoom in/out
- Fix not setting original coordinates when reading in GPS CSV
- Better detection of number of multispectral bands based on full set of data
- Recover manually stored flight height when loading a mission
- Fix issue with uploading multiple missions
- Fix issue with unrealistic progress bar when uploading multiple issues
- Fix issue when a long folder was selected

MAPEO Application

2023.02.07: Replacement product thumbnails with product names grouping per product group

Product thumbnails are replaced in the product tab by their product names. This to improve viewing performance and simplify user-interaction. Products are now stored in one of the following categories: AI;BASE;MAP;MASK;SATELLITE;OTHER



2023.02.08: Update new products

Following new products were added for the phenotyping customers:

- **GCP Survey + Basemap**: We suggest you order this product for the start of the season, right after sowing and placement of the GCPs. It will allow you to get a good quality digital terrain model for all your height/biomass related products throughout the season. Drone mission specification of the basemap can be 1cm RGB or 3cm MSP, depending on your sensor availability
- **Extension** of available **resolution** for **crop biomass** and crop **health products**. Based on user feedback, we are now extending the crop biomass and crop health product for different resolutions, which can be tailored according to crop type and growing stage. Following products are added: **Crop Biomass (Msp-10mm); Crop Biomass (Msp-20mm); Crop Biomass (Msp-30mm); Crop Biomass (Msp-50mm); Crop Biomass (RGB-2mm); Crop Biomass (RGB-5mm);**

Crop Biomass (RGB-10mm); Crop Health (Msp-10mm); Crop Health (Msp-20mm); Crop Health (Msp-30mm); Crop Health (Msp-50mm).

- **Yellow Index** and **White Index**. Crop generic color indexes which assist you to analyse specific traits like flowering or diseases based on high resolution RGB imagery. Drone mission specification of these traits are set to RGB-5mm.

2023.02.09: Updated support GCPs
GCPs guarantee the accuracy and consistency in your data products, but they obviously also complicate the drone operations quite a bit, see following blog post on the topic: https://blog.vito.be/remotesensing/dos-and-donts-to-collect-accurate-drone-data
Since this release, we have two additional features in the MAPEO application related to GCPs. Our expectation is that both will benefit MAPEO users by improving operational efficiency and quality of your products.
(i) We are **standardizing the gigantic sprawl of geographical and projected coordinate system** used in MAPEO. From now on we will actively support **following coordinate systems**:

- **UTM coordinate systems with global ellipsoidal datum (EPSG:5773)** -> "Google Earth height"
- **EPSG:31730**

EPSG:4326 will receive limited support in the future for the purpose of GCP management and for data processing**.** The MAPEO Application will still provide support for EPSG:4326 as an output coordinate system.
Our strategy is to move customers as much as possible to UTM for use cases that are currently using EPSG:4326 GCPs. Further steps are planned from Q3 2023 onwards.

In case coordinates are supplied in **other coordinate systems**, **MAPEO will convert the coordinates to the UTM coordinate systems** of your zone with reference to the global ellipsoid datum (EPSG:5773).

(ii) The **quality of the ground control points** can now be analyzed with MAPEO. In case you upload a GCP file with **coordinates which are located within 1m distance from each other, the mean X,Y and Z value will be calculated and standard deviation between those point set as point accuracy**. In case the **accuracy** is **lower than 5cm, the involved GCP coordinates will not be uploaded.** This feature supports users who take several independent measurements for GCPs as additional check for their positional accuracy.

2023.02.10 Collection of MAPEO Application Bug fixes:

- For count products with multiple labels/classes, the object classification can no longer get overwritten by the application assigned to the dataset.

MAPEO API

No updates

Contact information

https://support.mapeo.be/