

Document information

Document: Release notes MapEO
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General: Main focus of this release is on the performance improvements in both the API as in the viewer. This release has direct impact on the API services and has potential impact on running operations at user side. Please read carefully the information provided in this document to assess impact of the changes to your application.

MAPEO Field Software

No updates

MAPEO Application

2023.01.01: Performance improvement map visualization

Improvements have been made to the map visualization performance. To improve this performance several of the calculations that were previously done on the fly, whenever a user loads new map products in the viewers or selects a new date in the timeslider, are now pre-calculated such that the viewer can dedicate all his resources to the visualisation of the map products. The user should see a notable improvement in viewing performance.

2023.01.02: Download ticket handling

Before this release, when ordering new plot statistics in batch, the individual download tickets were made available (“DONE”) only when the complete batch was finished. From this release onwards tickets will be handled individually and can be downloaded as soon as they are ready.

2023.01.03: Mask and mask-ms products and masked statistics

From this release onwards, mask and mask-ms products are generated for specific products and use-cases. For the phenotyping and agricultural use-cases (“industries”), when a user selects a Biomass product, a soil mask is created by default based on the crop cover product. In case of apple or pear crops, a soil mask is created based on the crop height product. The difference between mask and mask-ms is the source of the cover map – cover vs cover-ms – which originate from an RGB or Multispectral drone flight. These masked products can be visualized like any other product in the viewer. Additionally, you can now choose to export masked plot statistics in the extracts wizard. Only product pixel values where Mask = 255 (black pixels!) are taken into account in the plot statistics. Before choosing the products you want to include in the export, you’ll be asked if you want to include a particular mask. If you select a mask, only products which are generated from the same source (RGB or Multispectral) can be selected for plot statistics. This to ensure eg. soil masked NDVI statistics are really focusing on the plant objects. If no mask is selected, plot statistics are generated in the same way as before the release.

Bug fixes

FD-4744: resolved issues regarding memory usage of Analyze functionality

FD-5583: resolved issue where MAPEO application showed different product dates when user was in different time zones

MAPEO API

2023.01.04: Performance improvement field/plot statistics download

Issue with the low performance of the plot statistics download functionality was mainly due to high load on the service on specific moments. This can happen for instance when several customers request statistics calculation for all their locations/products/dates in 1 request. This will be improved in this release by increasing the speed of ticket handling and splitting large requests into individual subtasks which are handled separately. Users should notice large improvement on ticket handling speed.

Still on our roadmap, we plan to investigate options to further scale the statistics service to adapt to periods with a large volume of requests. Expected release date of this adaptation: end Q3 2023. Within our current design we expect the user by default to execute 1 download per location/product/time, preferably spread over time, eg whenever new products become available.

IMPORTANT NOTE:

Users should make sure to download their results and don't start new requests in the week before the deployment. At the moment of deployment, it is possible the request history is lost. Hence, we do not guarantee that ongoing requests are still available after deployment.

2023.01.05: Include area statistics in count-based product exports

From this release onwards the plot statistics for count-based products will include, next to the number of objects per type ('count'), statistics on the size of the objects within a plot: min, max, mean, median, var, std, objectarea, density. These area statistics are calculated per object type found in the count product. Object name and object type number are given as follows: "object_x: type name" with x the object type number.

IMPORTANT NOTE:

Users should make sure this change in format of count statistics is compatible with their downstream applications.

Contact information

<https://support.mapeo.be/>