X-PAD Ultimate

Service Pack #2 2023

Fall 2023

GEOMAX

MISCELLANEOUS

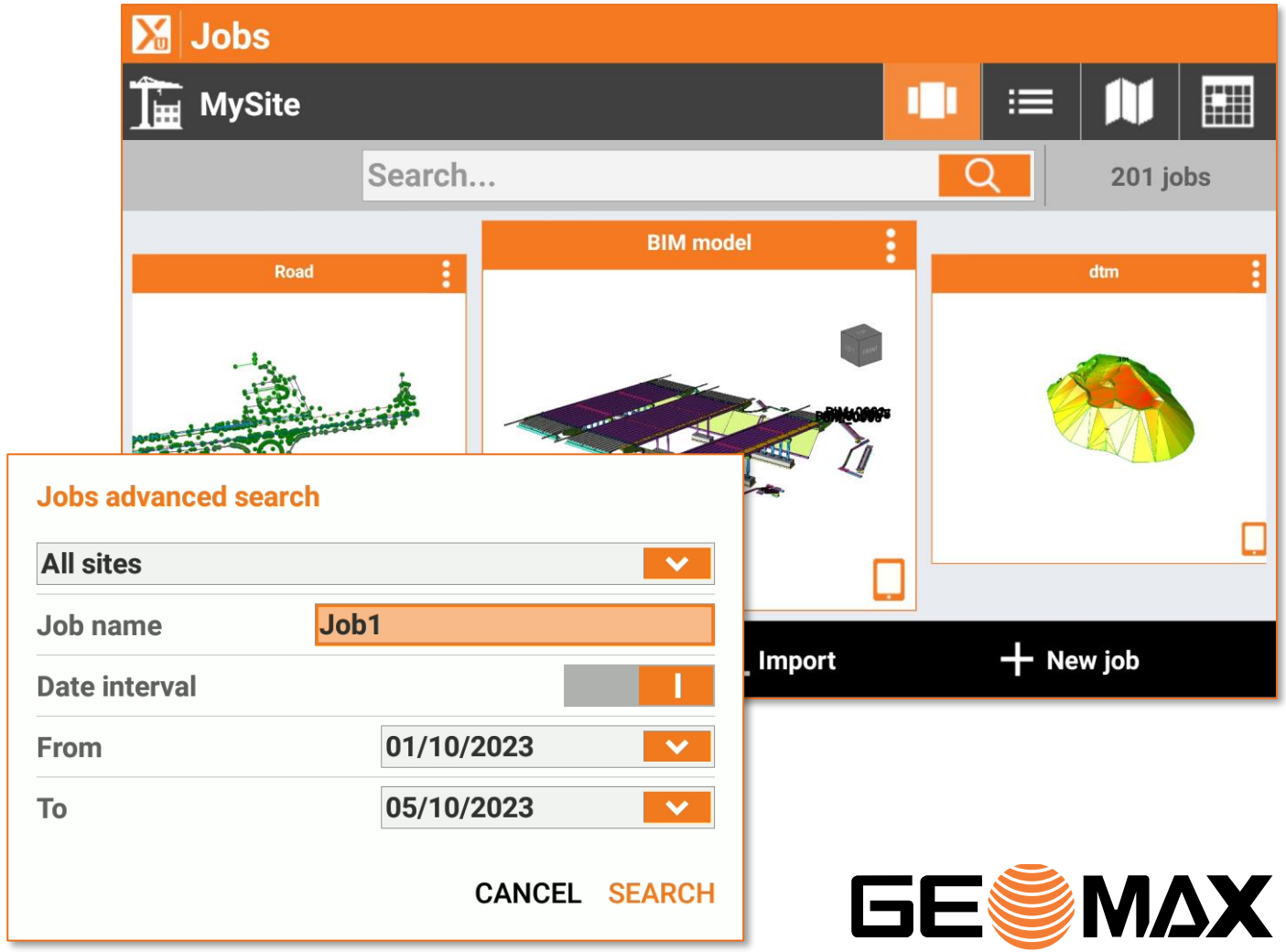
General improvements

X-PAD Ultimate is continuously improved and updated daily. Minor improvements and bug fixes are not listed in this presentation but can be found in the release notes for this release.

Jobs – Advanced search

A new panel in Jobs manager and in Sites manager allows to quickly search for a job or a site by entering part of the name.

With the Advanced search it is also possible to search for a job by specifying a date interval; search is executed in the current Site or in all sites.

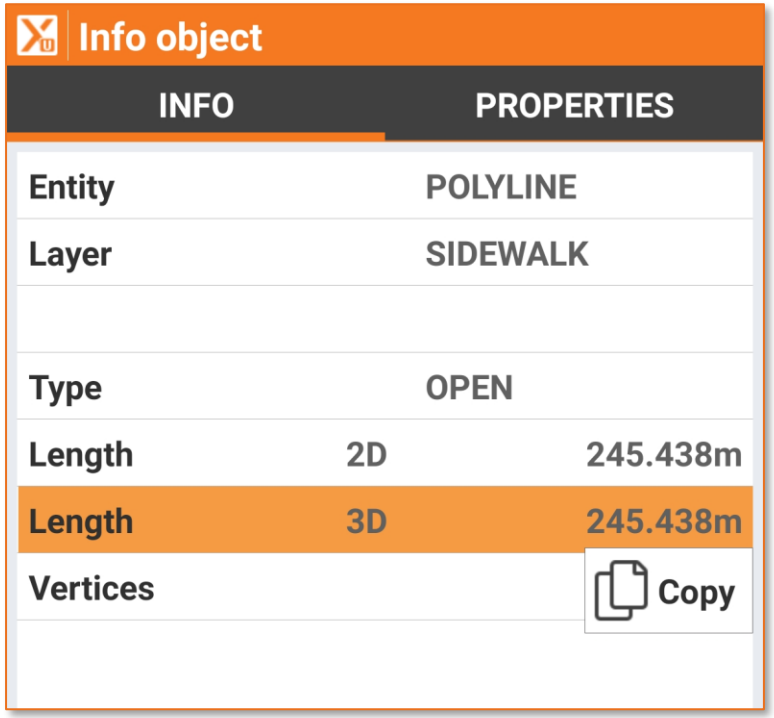


New tablet GeoMax

The new GeoMax Zenius08 tablet is fully supported by X-PAD Ultimate. The physical keys and the 12 function keys can be customized with your favorite X-PAD functions to be faster in the field.

Copy values from Info

From all the pages that provide information about selected objects, or that provide results, it is possible to copy the interesting values and recall them later in the advanced keyboard as input value or in formulas.



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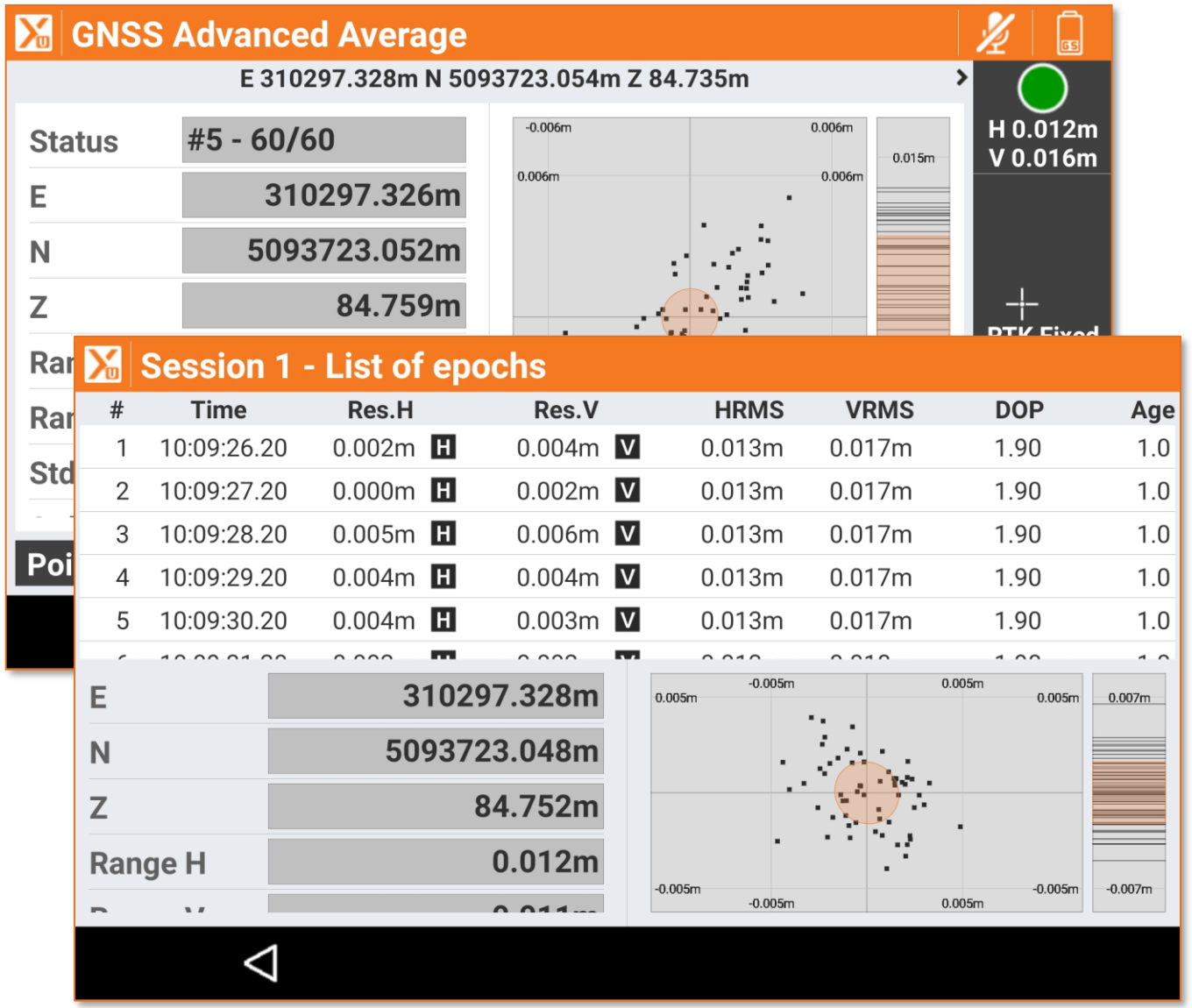
GNSS

GNSS averaging & analysis

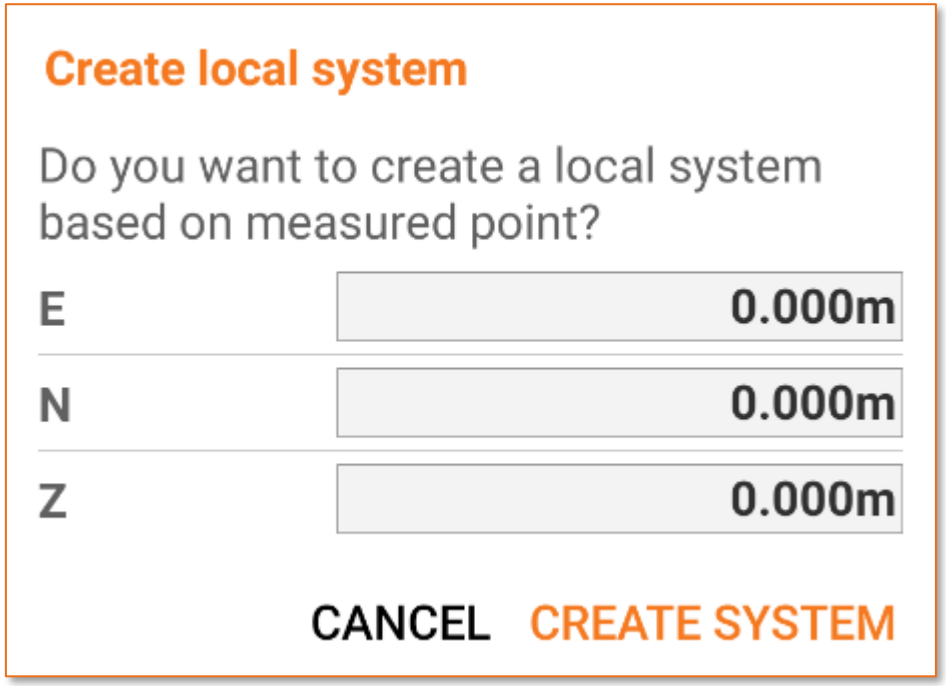
GNSS accuracy is always improving and GNSS receivers, due to their flexibility, are used to measure or check reference coordinates. To ensure accuracy and avoid false initialization repeated measurements are requested.

With GNSS averaging & analysis tool, X-PAD Ultimate allows to perform redundancy measurements with the possibility to access to all the epochs data both in graphical and analytical form. Out of tolerance epochs can be excluded to ensure the maximum accuracy.



Local system - origin

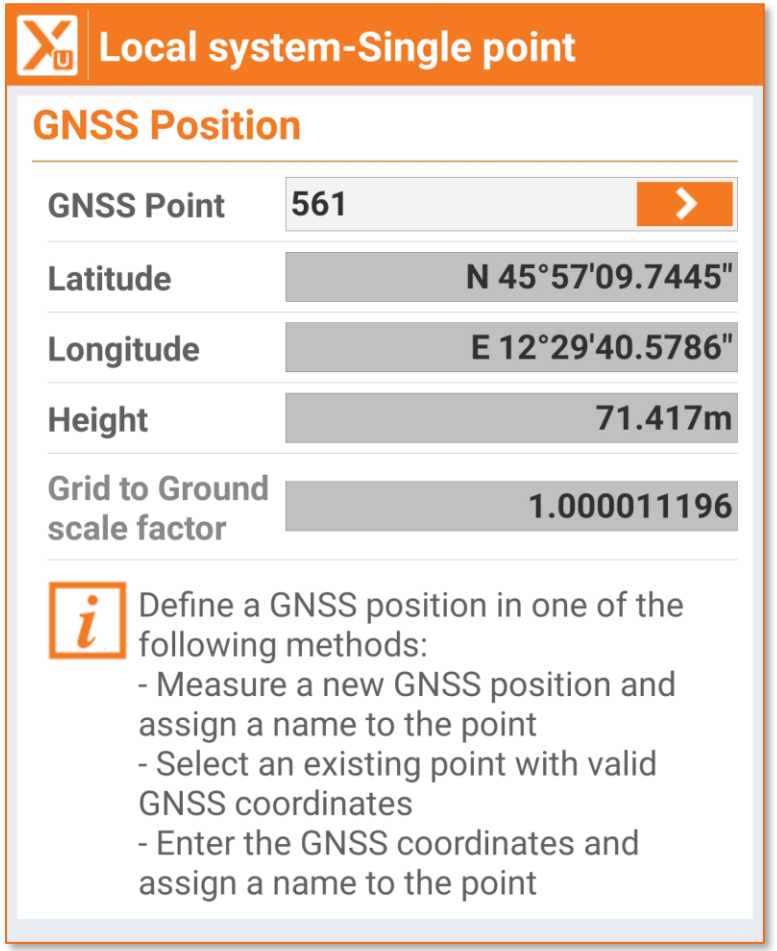
In Survey with GNSS it is possible to start to measure points without to specify any coordinate system. In this case a local system with coordinate an origin at 0,0,0 is created. Now it is possible to enter the coordinate of the origin of the local system, for example to avoid to have negative coordinates.



Local system 1 point – grid to ground scale factor

In GNSS measurement, a local system based on a single point, allows to have a coordinate system based on Ground coordinate.

The scale factor that is applied to grid distances to become ground distances is now visible together with the parameters of the local system.



NMEA Output on Zenith16

GeoMax Zenith16 receiver can now be used together with “NMEA output” command available in X-PAD.

X-PAD continues to maintain the communication with the receiver and continues to send RTK corrections, while another application can connect to the main Bluetooth channel and get NMEA sentences.

In this way Zenith16 and X-PAD can be used in combination with other devices as, for example, georadars or echosounders.

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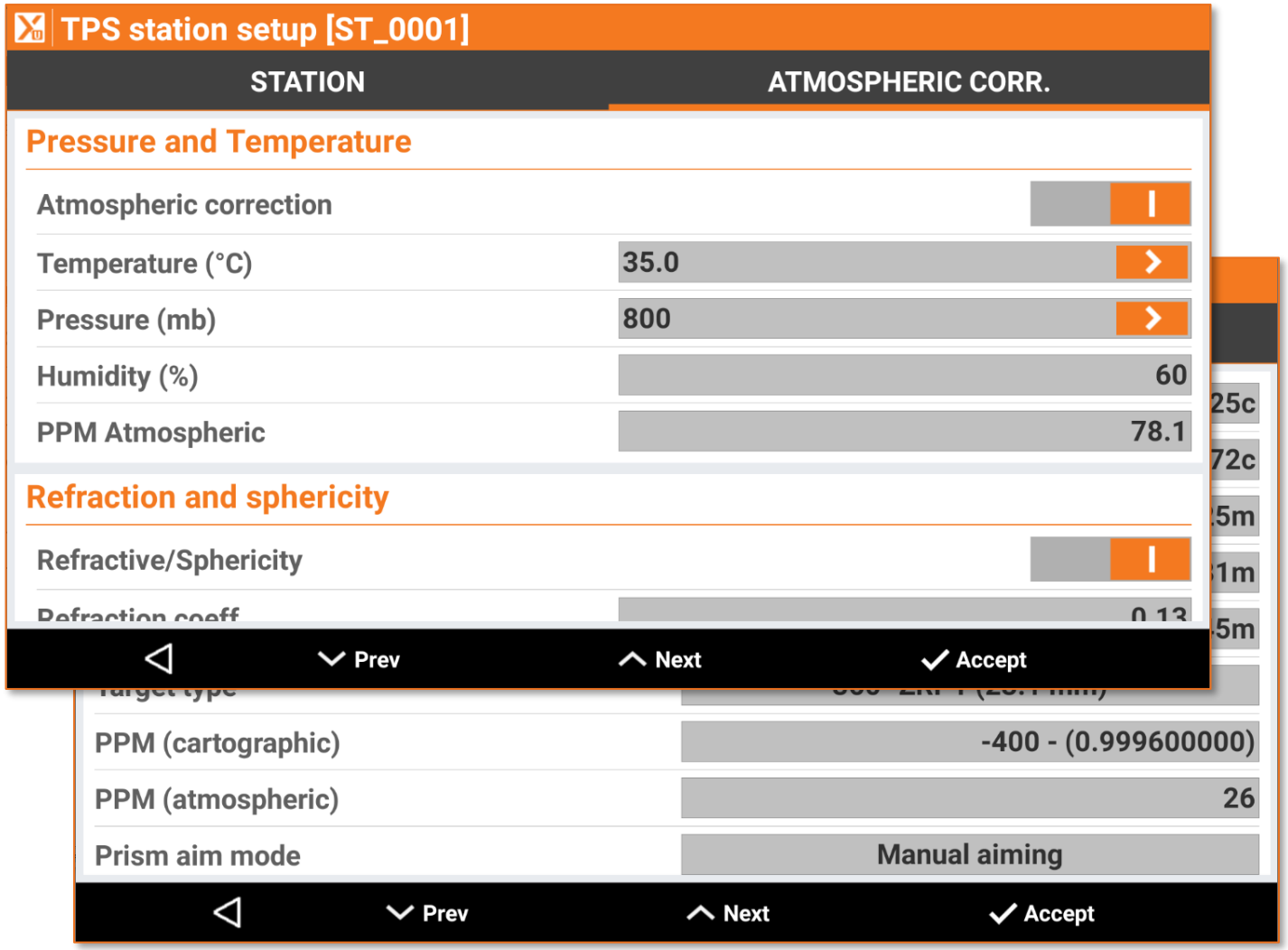
TPS

Atmospheric corrections, PPM and other

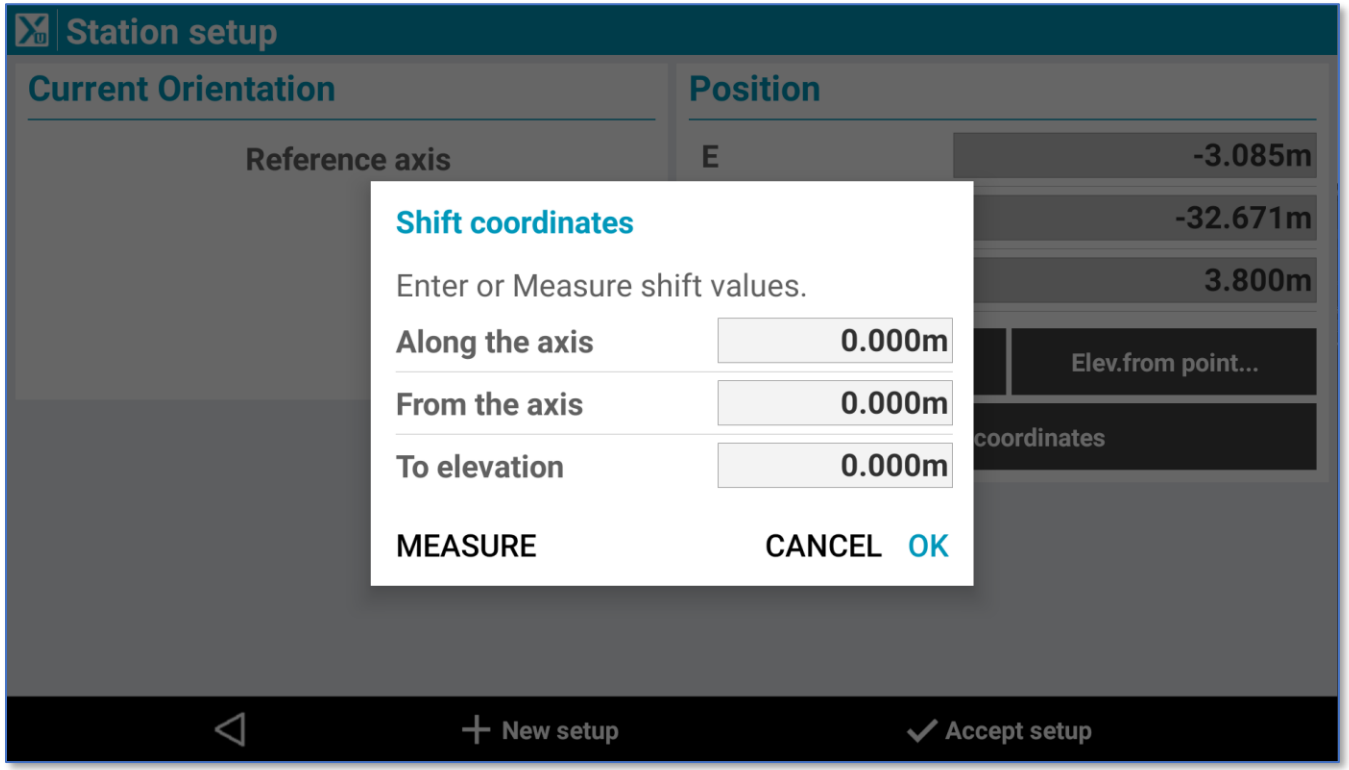
To clarify several questions received about how Atmospheric coefficients are use, difference between atmospheric PPM and geometric PPM, we are now storing more information and make them available to the users in the app, in the exports and in the reports.



Shift Station coordinates (Build version)

In station setup with Reference axis it is possible, at any time, to shift the coordinates to a different origin.

Shifting values can be entered or calculated by measuring a reference point.



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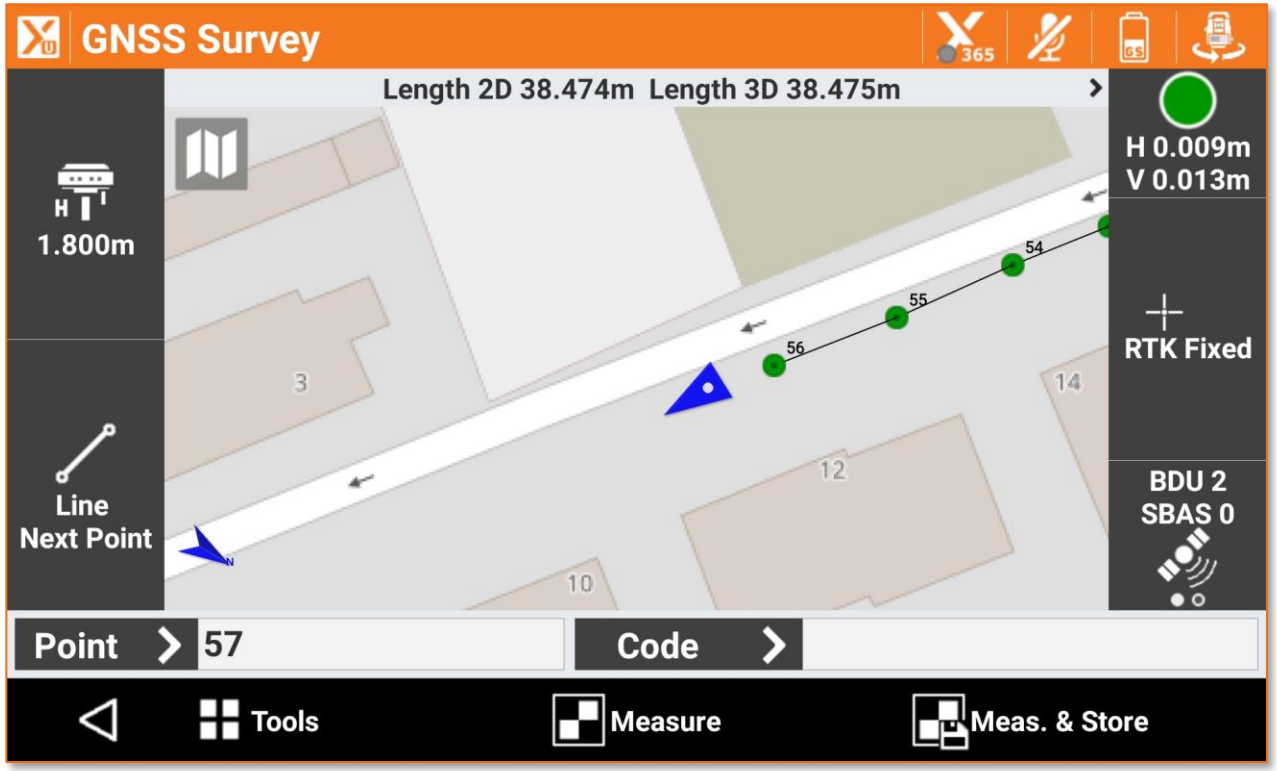
SURVEY

Survey wheel

In TPS and GNSS measurement, when the Line drawing tool is active, it is possible to have, on the top bar, its current full length (2D and 3D).



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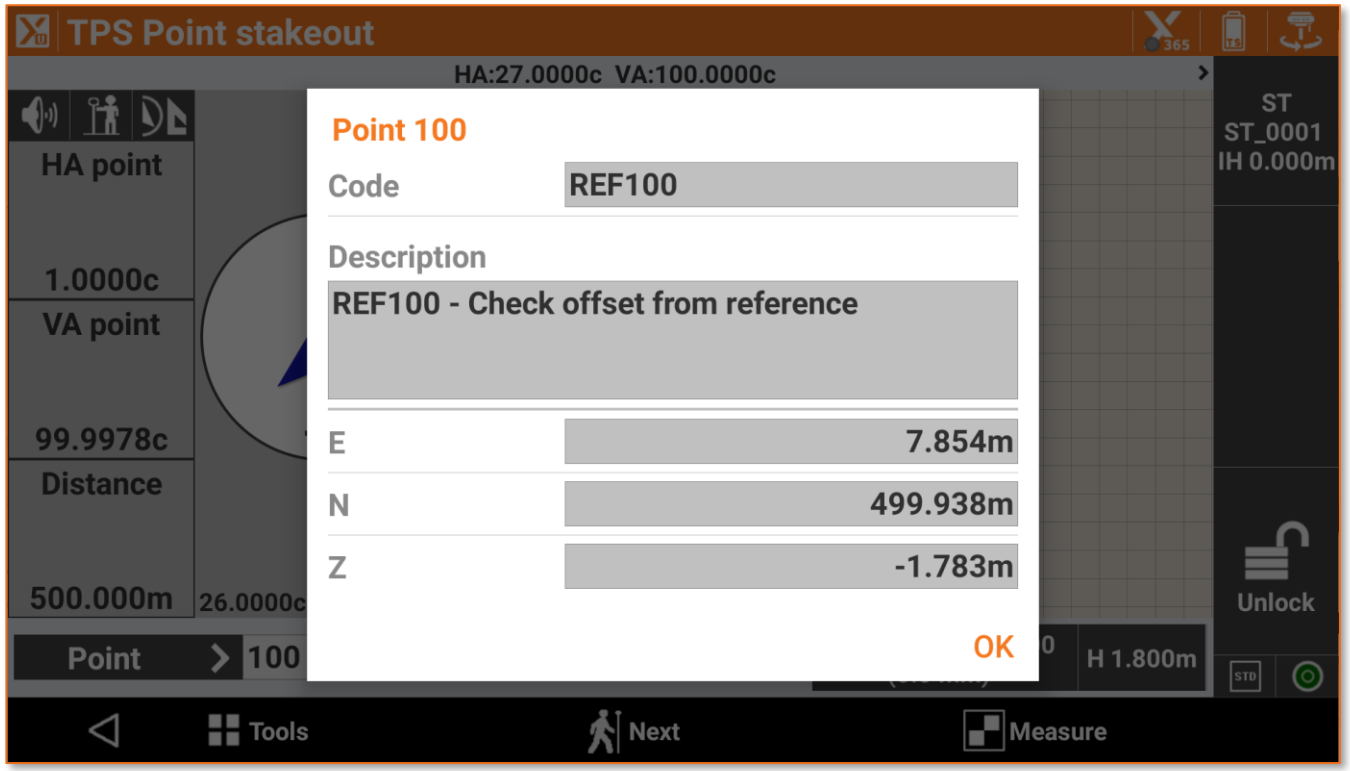
STAKEOUT

Code & description

Stakeout of point could not be just a matter to find the position in the field but sometimes it is necessary to take in considerations other information that often is stored in the code or in the description of the points.

For this reason, during point stakeout it is possible to open a dialog that reports all the information about the point, including code and description.



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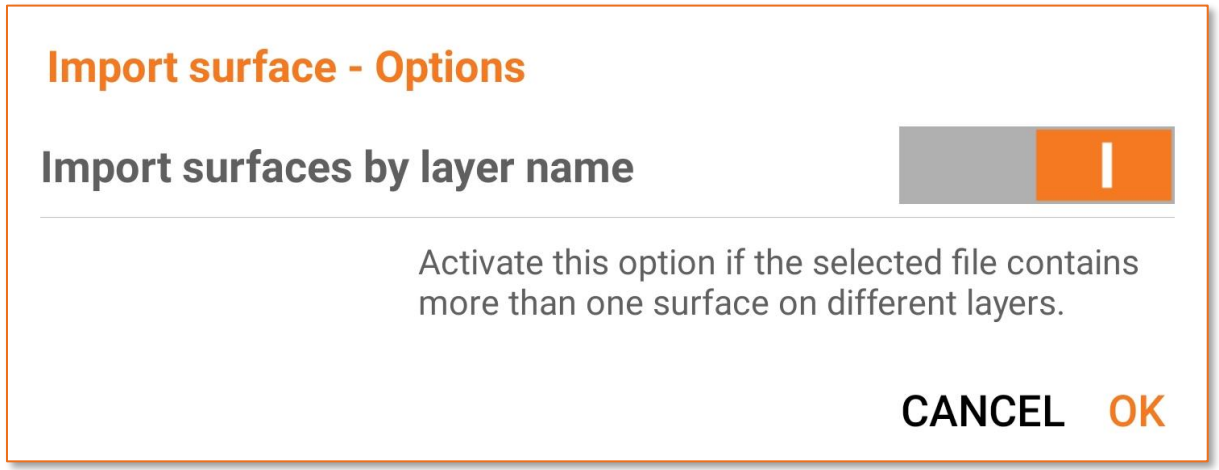
SURFACE

Import multiple surfaces from DWG/DXF by layer

Surfaces can be imported from DXF/DWG files; if they are stored in different layers, it is now possible to import them as separated surfaces and not as a single one.



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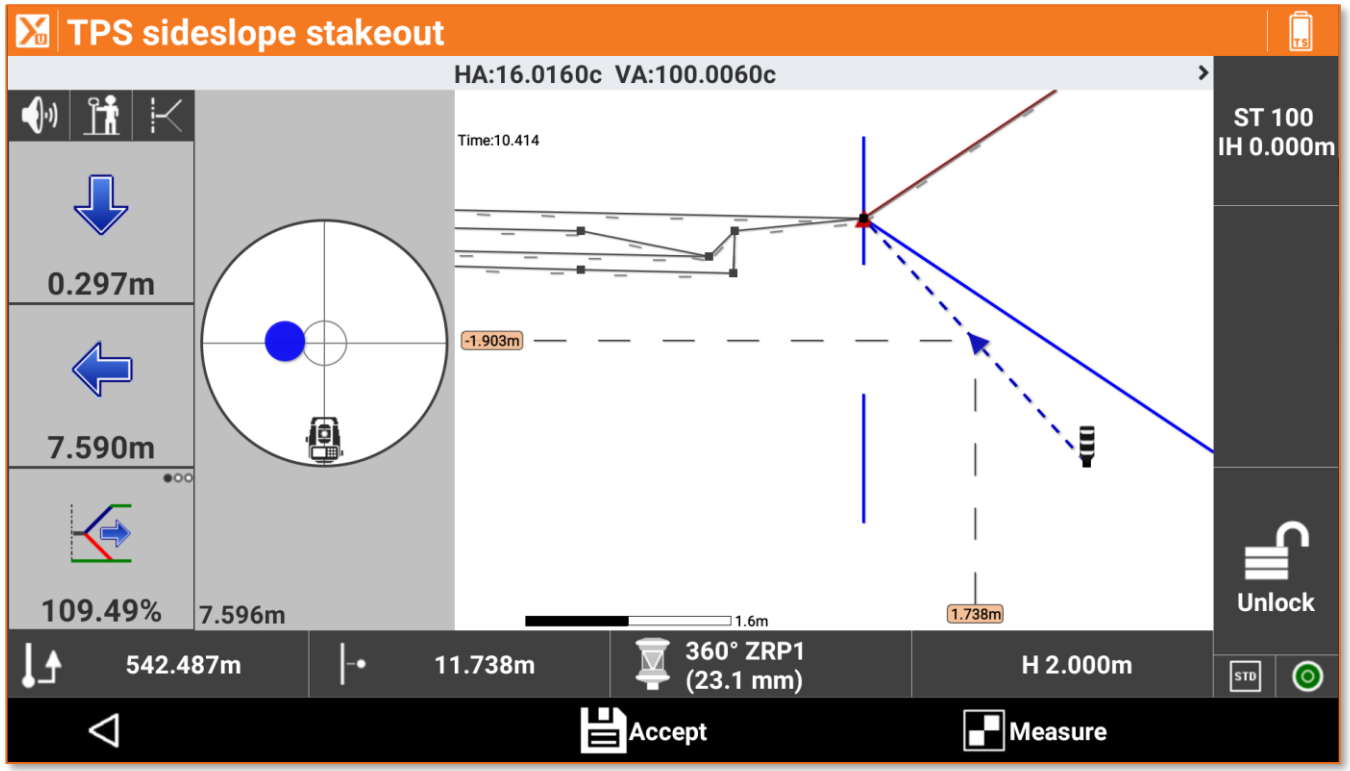
ROAD

Sideslope stakeout

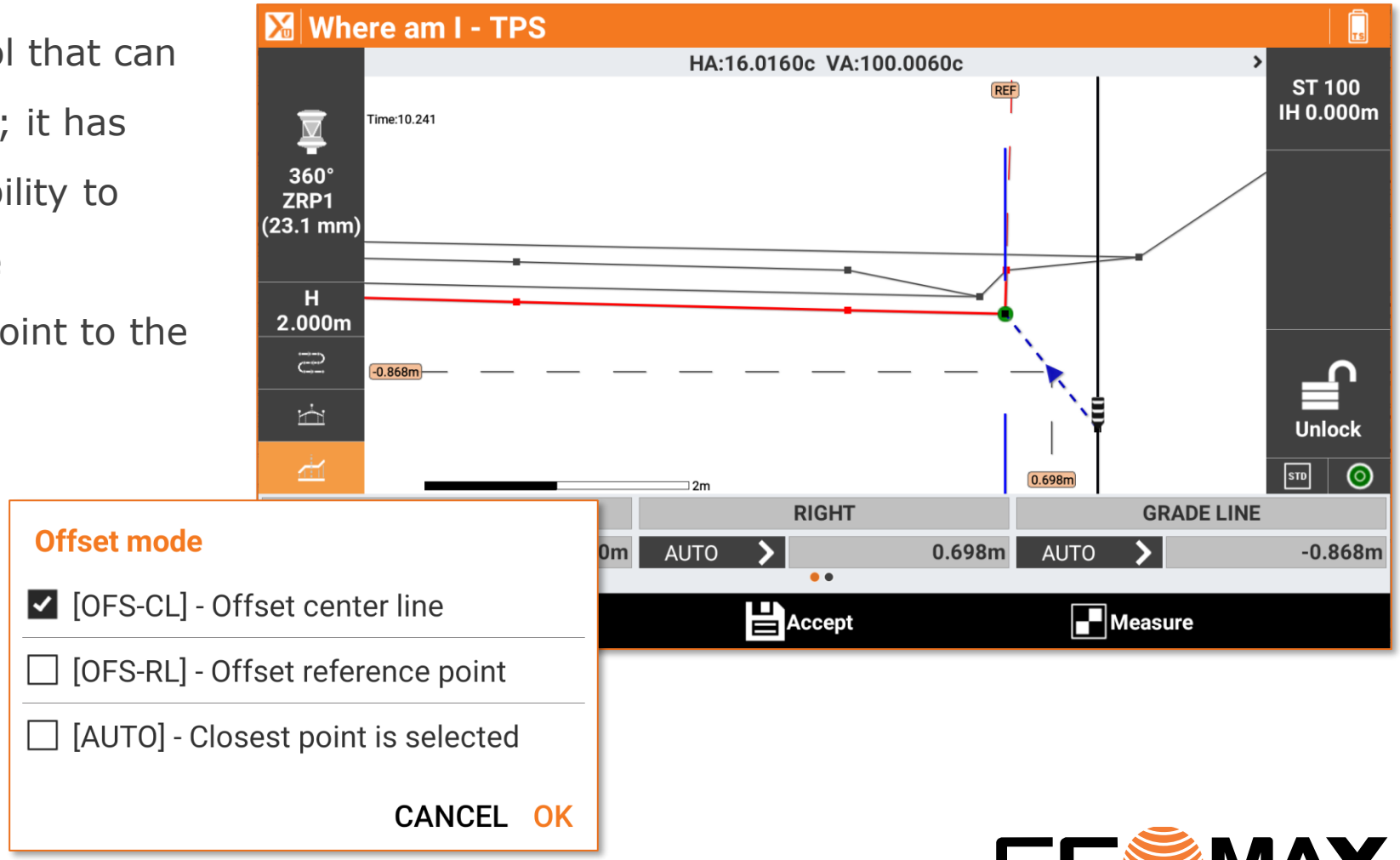
In sideslope stakeout new information are now displayed on the graphic view: the horizontal and vertical distance from the hinge point of the side slope.

These two information are extremely useful and are usually reported in the stake peg.



Where am I – Automatic reference point

Where am I is a so flexible tool that can be used for different purposes; it has been extended with the possibility to automatically provide distance information from the closest point to the current position.



Where am I – Stakeout report

Where am I is used often for road stake operations and can be used to store points.

For each stored point, corresponding stakeout information (distances, offsets, …) are stored and become available in the stakeout reports.

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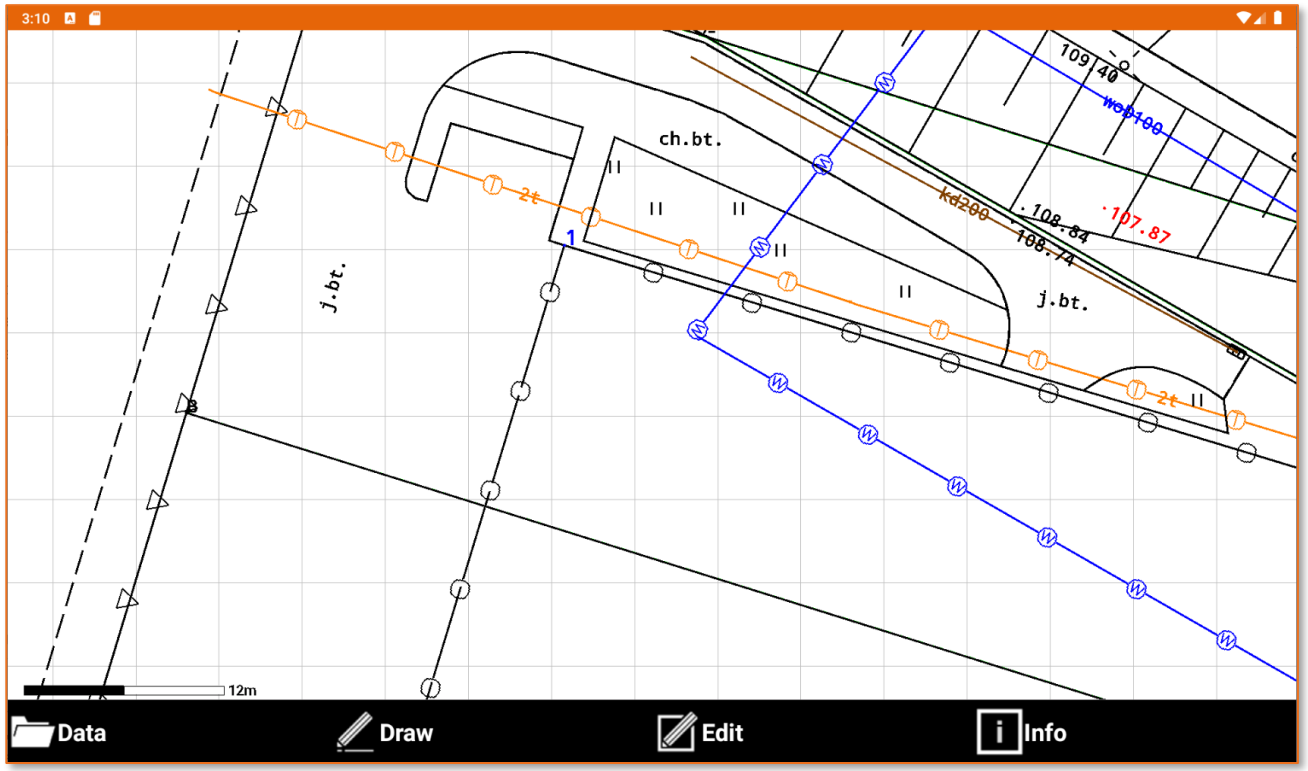
CAD & MAPS

Advanced linetypes

Linetypes are used to represent different type of elements in the drawing. X-PAD Ultimate is now able to support extended linetypes with symbols repeated along the line.

A specific tool allows to create custom linetypes to be used in the current or in other projects.

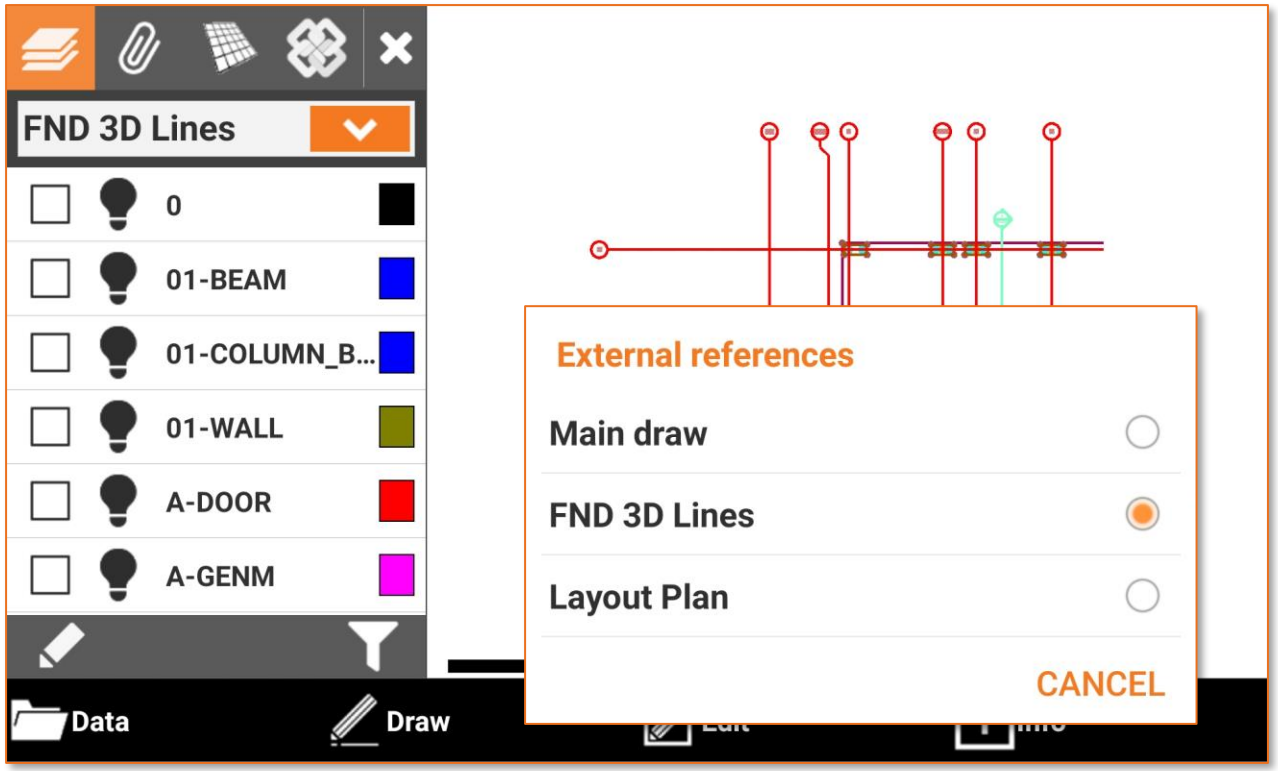


IMPORT & EXPORT

External reference

External reference is an exceptional tool to manage in a flexible way different data on the same job. Now it is possible to maintain the layer structure of the DWG/DXF or X-PAD imported documents; with previous version all the entities were stored in a single layer.

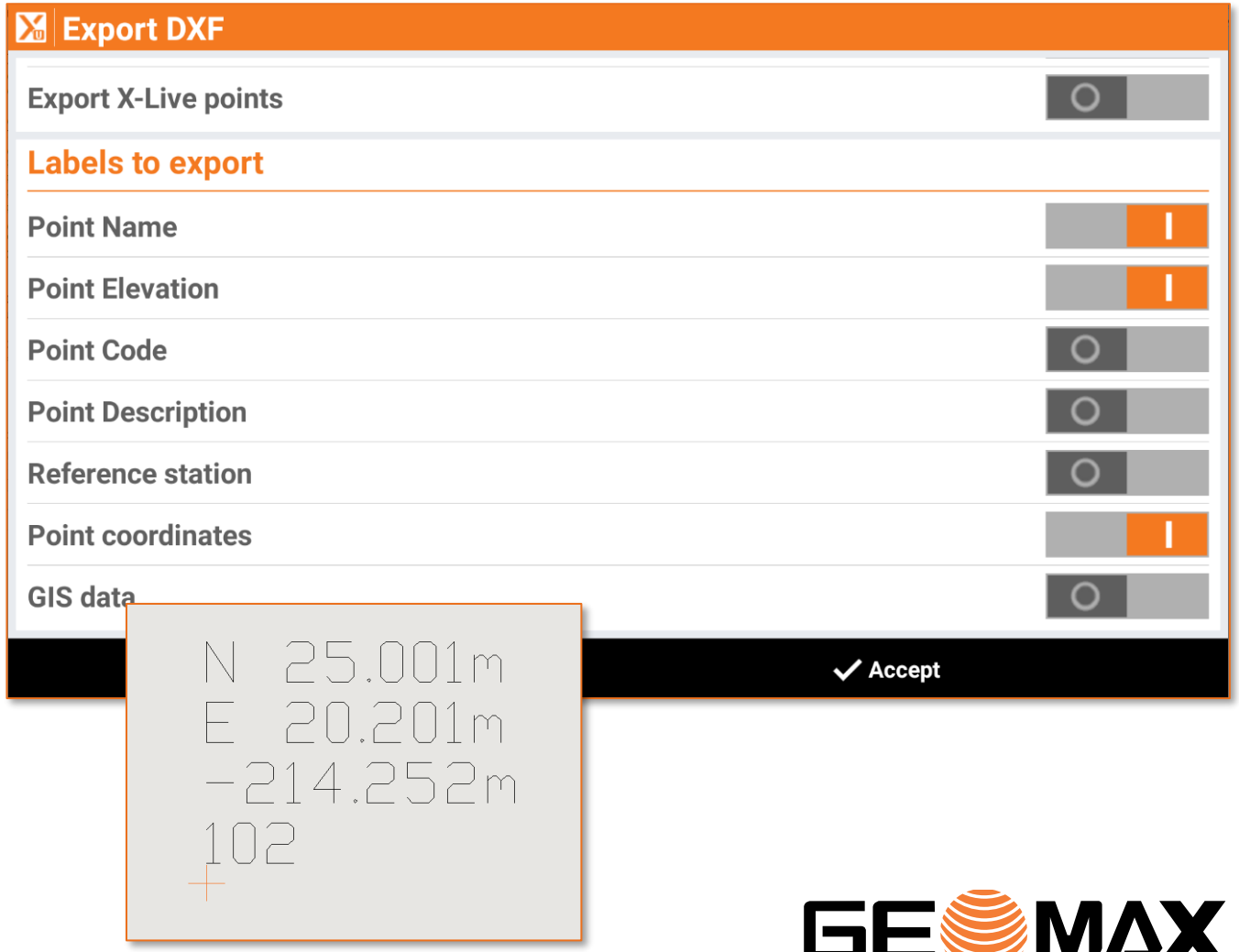
Moreover, it is possible to handle layers visualization for each single document in a very easy way.



Coordinate labels in DXF export

DXF exports of topographic point has been extended with the possibility to have, for each point, a label or an attribute that reports the east-north coordinates of the point.

This export feature can be activated or deactivated by a specific feature.



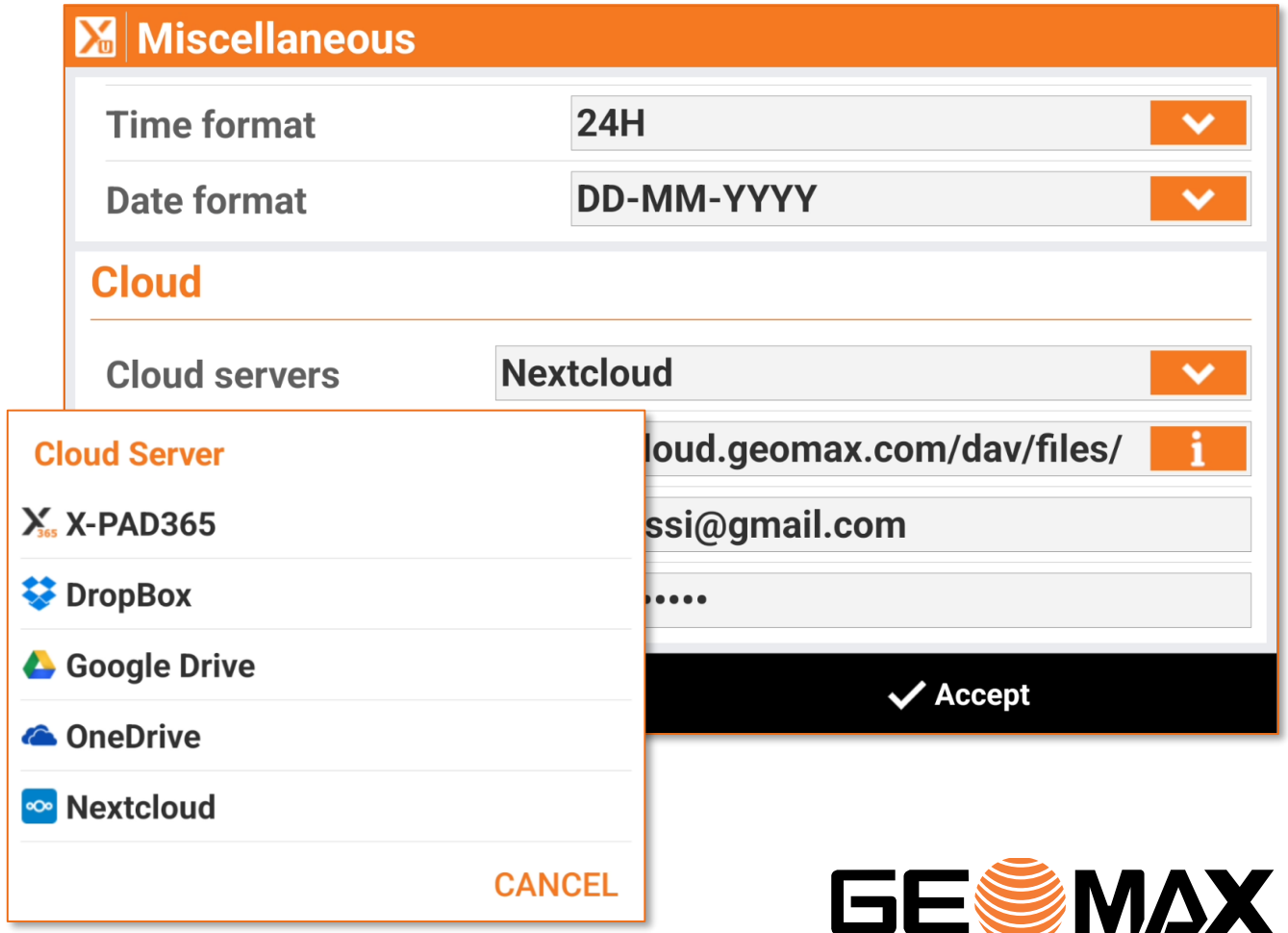
Cloud import improvements

Importation of files and data from Cloud server has been improved and doesn’t require anymore to additionally select the file to import. Once the file is selected from the cloud folder, then it is automatically downloaded and imported without any other intermediate step.

Nextcloud file hosting service*

Nextcloud is a file hosting service that is becoming popular especially among professional users for its flexibility and data protection.

X-PAD Ultimate offers an integrated direct connection with this service allowing users to download and upload data and files.



* Requires Android 7 or higher