

# User Event in New Zealand --- November 20<sup>th</sup> - 24<sup>th</sup> 2017

Wellington Airport Conference Center  
 International Airport, Level 2, Main Terminal  
[www.wellingtonairport.co.nz/services/#facilities-airport](http://www.wellingtonairport.co.nz/services/#facilities-airport)

	Training topics
<b>Monday, 20.11.</b> (no or little experience required)	<b>Basic Training for TerraScan</b> Basic concepts of processing any kind of point clouds (airborne, mobile, photogrammetric) with TerraScan: - importing trajectory information - project creation and point cloud import - visualization and evaluation of the point cloud - point cloud classification approaches including batch processing, manual tools, grouping as new processing approach in TScan* - ground extraction, export of ground models
<b>Tuesday, 21.11.</b> (no or little experience required)	<b>Basic Training for UAV point clouds (TerraScan UAV** and TerraMatch UAV**)</b> Workflow of processing a UAV point cloud: - import of trajectory and point cloud into TerraScan UAV - matching of flightlines - classification approaches - examples for delivery products: ground extraction, volume computation of stock piles, to be defined (you may suggest other end products interesting for you in the registration form) ** TerraScan UAV and TerraMatch UAV will be "lighter versions" of TerraScan and TerraMatch for processing UAV data. They are still under development. If they are not yet ready for the training, the full versions of the software will be used.
<b>Wednesday, 22.11.</b> (no or little experience required)	<b>Basic Training for TerraPhoto</b> Basic concepts of processing aerial imagery with TerraPhoto: - importing camera calibration and image positioning information into TPhoto - tie points for camera calibration refinement and improvement of image positioning - production of an orthophoto mosaic
<b>Thursday, 23.11.</b> (for any experience level)	<b>Demo: City Models (TerraScan and TerraPhoto)</b> Workflow of creating and visualizing textured city models based on ALS point clouds and images: - automatic building classification and vectorization - import of image data from a five-camera system (vertical + 4 oblique cameras) - creation of wall textures from oblique images - mapping of trees in public spaces (e.g. along roads)* <b>Demo: Powerline Data Processing (TerraScan)</b> Processing ALS point clouds for powerline maintenance and mapping: - classification of point clouds along powerline corridors - automatic vectorization of wires, half-automatic/manual tools for improving the wire vectors - detection and reporting options for danger objects* - mapping of tower locations*
<b>Friday, 24.11.</b> (for any experience level)	<b>Demo: Processing Data of Mobile Mapping Systems (MMS) with TerraScan, TerraMatch, TerraPhoto</b> - processing MMS data of roads and highways (drive path matching, road surface extraction and analysis, pole vectorization*) - processing MMS data of urban areas (matching MLS to ALS point clouds*, visualization of the combined point cloud)

Terrasolid reserves the right to change the training content without prior notice.

The training on **Monday to Wednesday** is planned as hand-on training. Workflow steps are done step-by-step and only occasionally, prepared files will be used. Participants may decide if they want to do the training steps on their own laptops or just follow the training without doing the steps themselves.

On **Thursday and Friday**, the capabilities of Terrasolid software for processing point clouds of different application fields and the outline of processing workflows are illustrated in demos. Major workflow steps are shown in the software but prepared files will be used and automatic processes will be skipped in order to save time.

In the training, we will use MicroStation or PowerDraft CONNECT Edition and 64-bit versions of Terrasolid software. New features in the software will be shown whenever applicable. Major new features in the software are marked with a \* in the training outline above.