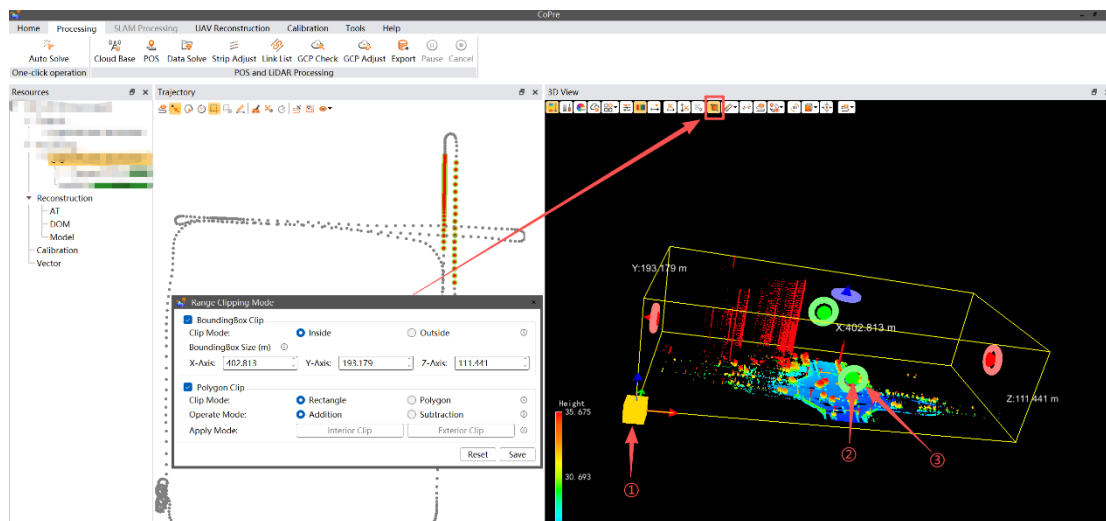


1. CoPre-2.10.0-202510

1. New Features and Optimization Items

General Scenarios:

- 1.1. Optimized Cropping Tool: Added the bounding box cropping function, which allows cropping point cloud using the bounding box and polygon cropping functions either simultaneously or separately.



Bounding box cropping: Save required point cloud through clipping mode or adjusting bounding box.

Two methods to adjust the bounding box:

- 1) Modifying the size of the bounding box through clipping mode.
- 2) Modifying the position and size of the bounding box via 3D view.

The square icon of ①: Translate the bounding box.

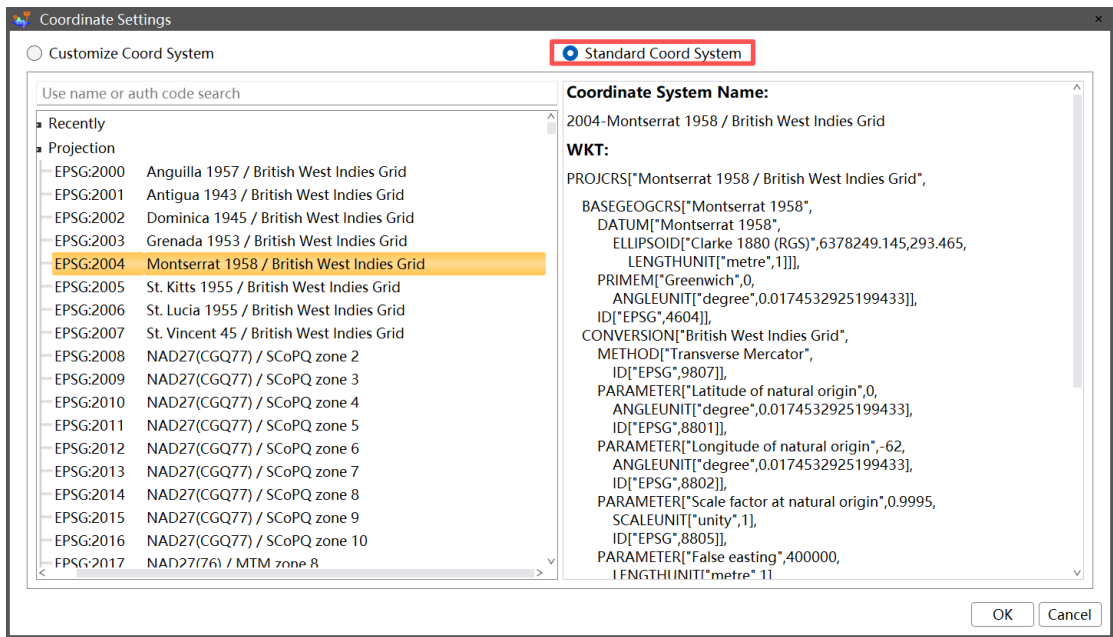
The cone icon of ②: Adjusting each face of the bounding box.

The circle icon of ③: Rotating and adjusting its angle.

- 1.2. The Newly added EPSG coordinate system in the coordinate system setting and coordinate system tool, the previous coordinate system settings have been changed to customized coordinate system.

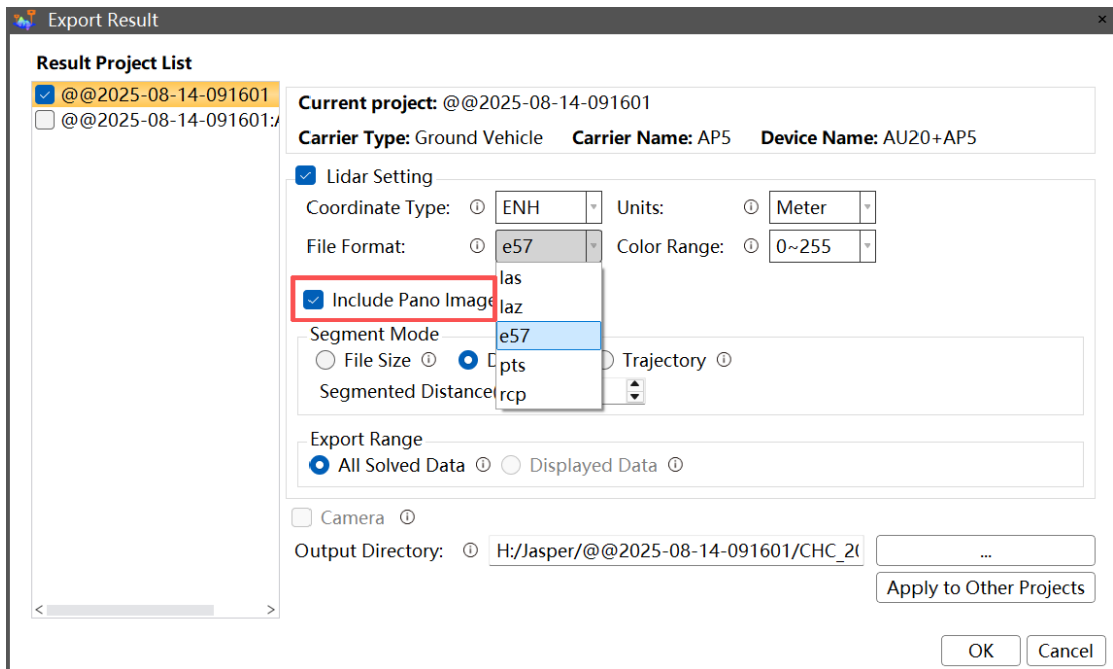
Note: The EPSG information can only be recorded under standard coordinate

system;

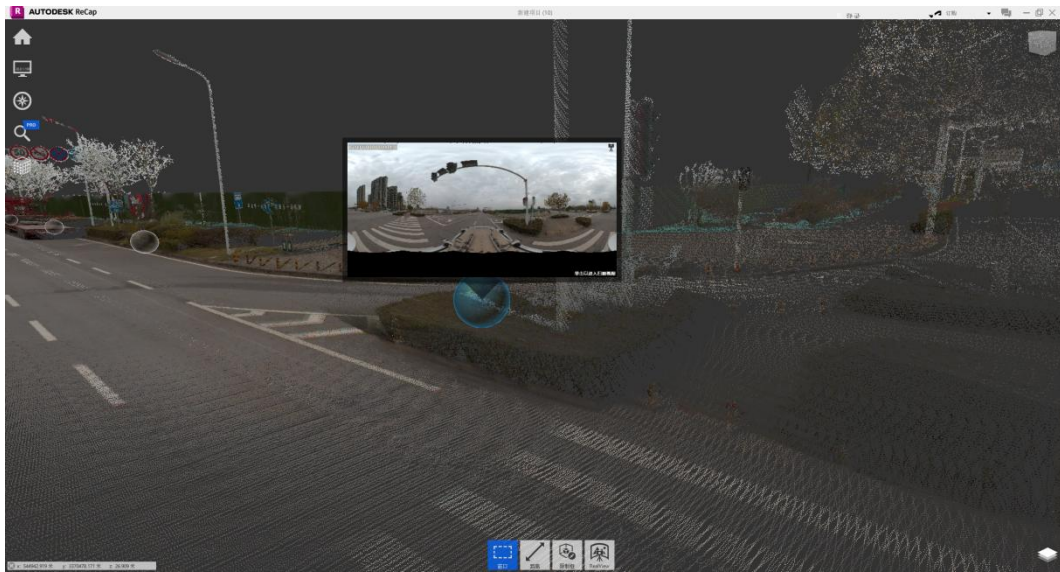


Three methods to select standard coordinate system:

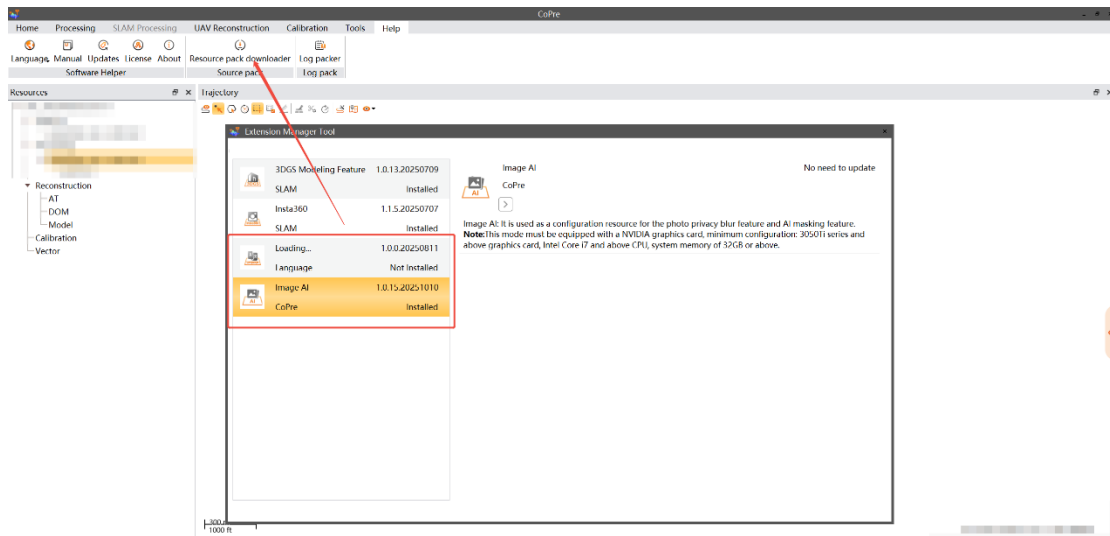
- 1) Search name or code of EPSG.
 - 2) Select via drop-down list.
 - 3) Select via recent usage.
1. 3. The newly added e57 export format with panoramic photos, and a new rcp format.



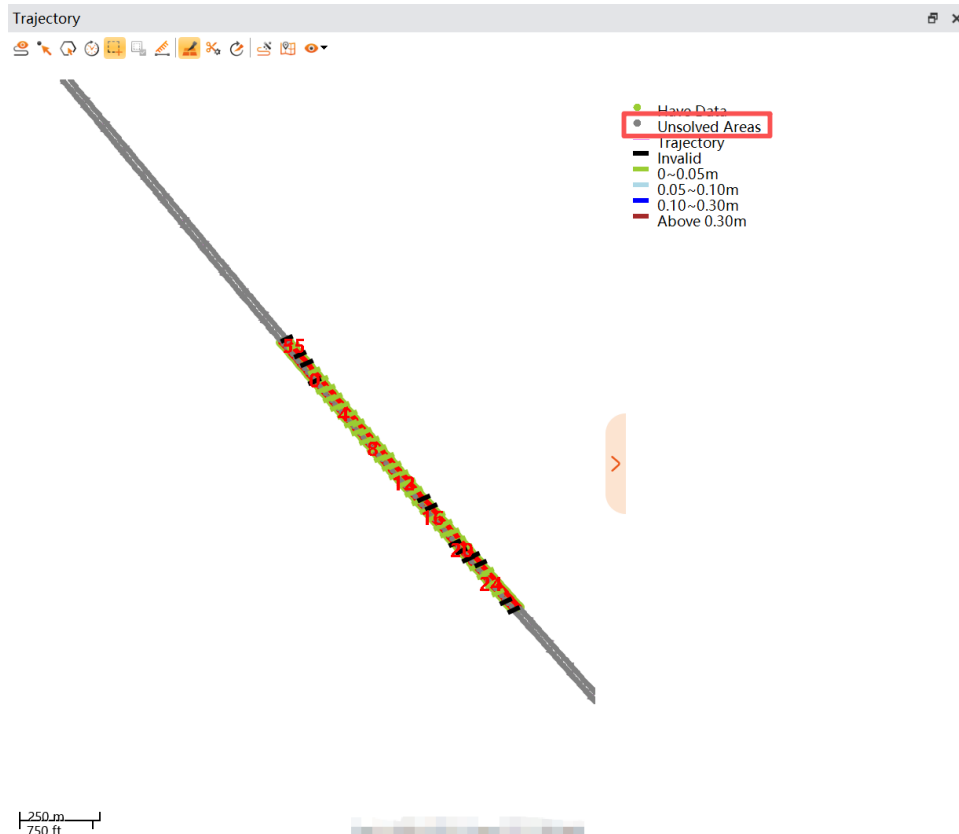
1.4. The effect is as shown in the figure below:



1.5. The newly added language packages and AI coloring for vehicle-mounted in the Resource Pack Downloader.



1.6. The newly added pause function can be displayed in the trajectory view.



SLAM:

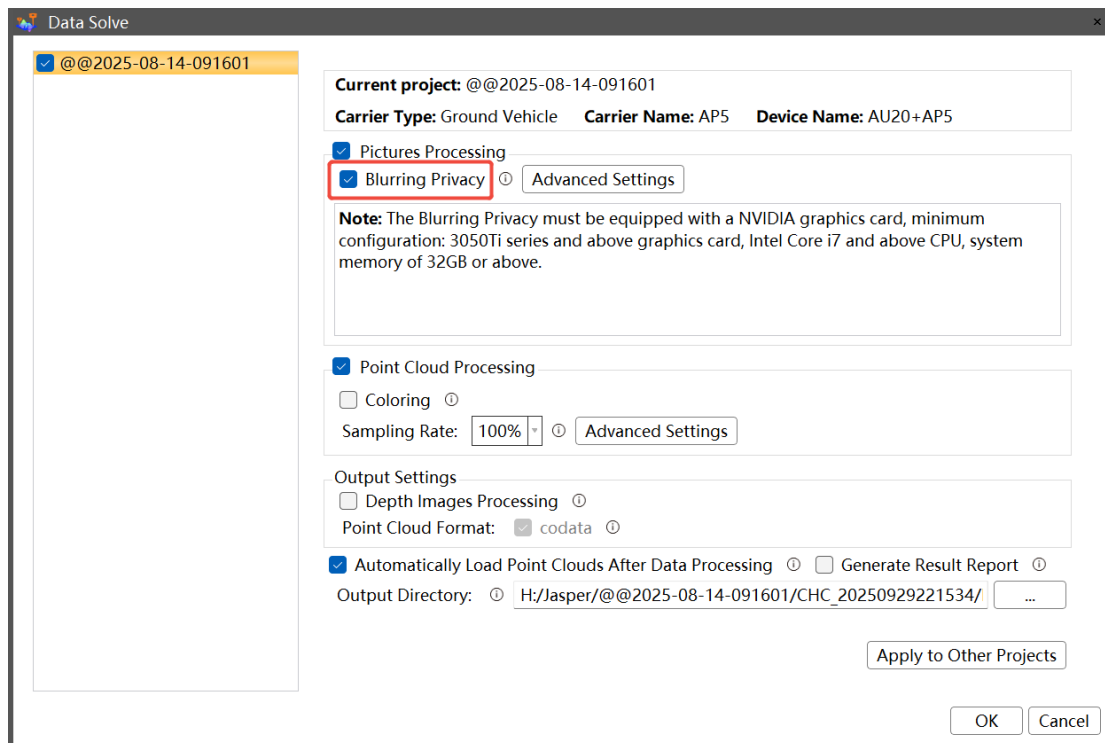
1.7. Optimized the stability in the tunnel and open area;

Airborne/Vehicle-mounted:

1.8. Optimized solving for vehicle-mounted, the process efficiency has been improved by 30%.

Note:

- 1) If the GPU driver is prior to version 466.77(May 2021), it needs to be updated to ensure that AI coloring and privacy blurring can be run properly.
 - 2) If AI coloring is run on PC for the first time, the AI model will initialize, which takes 10 minutes.
 - 3) To reduce the installer size, the advanced functions of the vehicle-mounted were placed in the Resource Pack Downloader. If users want to use AI coloring or privacy blurring functions, they need to download them in advance.
- 1.9. The newly added privacy blurring function for vehicle-mounted can blur the license plates and human faces in processed photos.

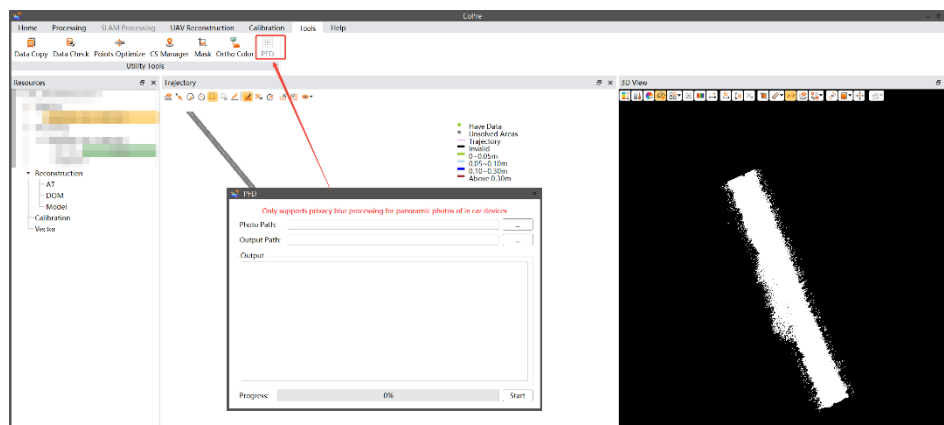


Note:

1) NVIDIA graphic card is required for privacy blurring function, Minimum specification: 3050Ti series or above, Intel Core i7 or above, RAM 32GB or above.

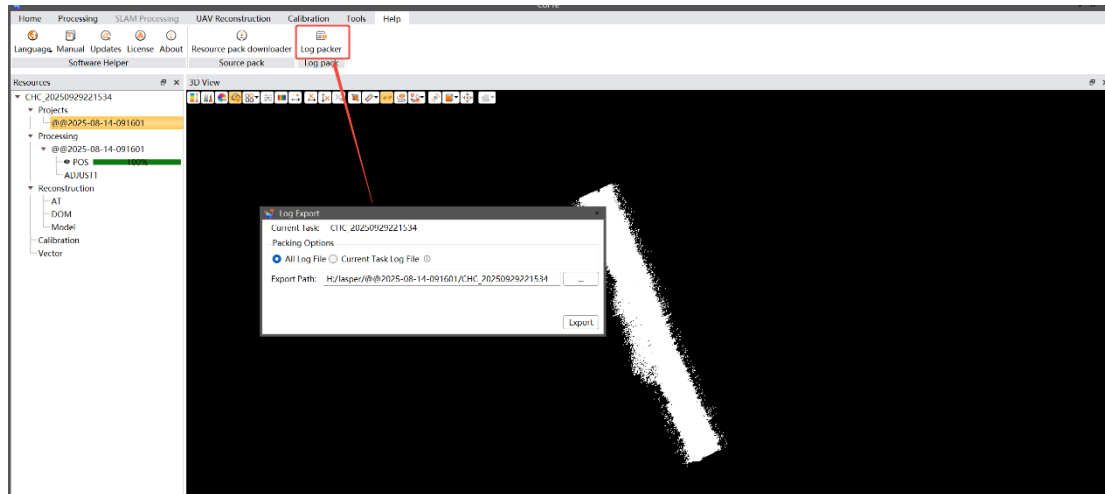
2) If the AI privacy blurring function is run on PC for the first time, the AI model will initialize, which takes 10 minutes.

1.10. The newly added privacy blurring tool supports importing photos for vehicle-mounted separately to output processed photos.

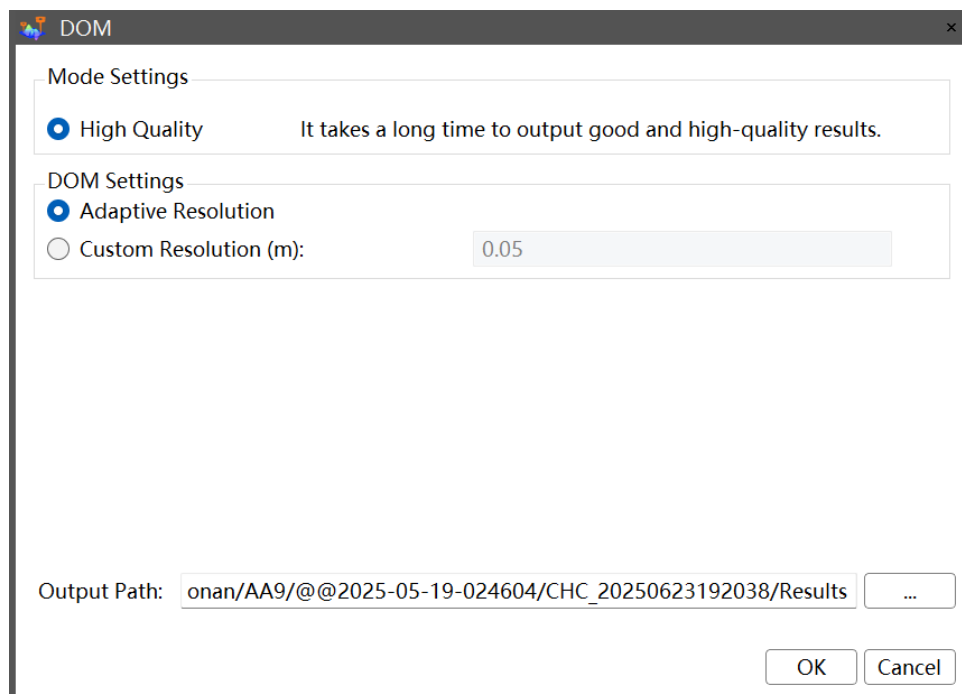


1.11. Supports processing Aerial Triangulation with 50-series graphics card to generate DOM. Copre now fully supports data calculation with 50-series graphics card.

1.12. The new added Log Packer function for one-click log export



1.13. The DOM generation button in the processing node and the high efficiency option in DOM settings have been removed



1.14. The newly added copy and processing functions for AA15P lidar.

1.15. The newly added calibration function for RIEBO R10pros camera.

2. Defect Repairs:

- 2.1. Fixed the issue of failure to process large data in some cases;
- 2.2. Fixed the issue where HPC coloring of SLAM data failed in some cases;
- 2.3. Fixed the issue where 3DGS modeling of Insta360 panoramic camera data failed in some cases;
- 2.4. Fixed the issue where POS calculation prompted failure in converting base station data (.HCN file) in some cases;
- 2.5. Fixed the issue where Czech coordinate systems Q1 and Q3 could not be used correctly;
- 2.6. Fixed the issue where the coordinate conversion tool inaccurately converted single point in some cases;
- 2.7. Fixed the issue where control points in BLH format imported into projects with conversion parameters had incorrect coordinate conversion;
- 2.8. Fixed the issue where the number of exposures calculated in project configuration was wrong when the interval of the camera's exposure time was less than 0.04s;
- 2.9. Fixed the issue where airborne data coloring and orthophoto generation failed in wizard mode;
- 2.10. Fixed the issue where saving after point cloud cropping failed in some cases;
- 2.11. Fixed the issue where sorting POS data of five-lens cameras prompted failure in calculating camera POS for some image data in some cases;
- 2.12. Fixed the issue where the POS trajectory display changed after closing and reopening the software in some cases;
- 2.13. Fixed the issue where the size of original data files in the SLAM report was incorrect;;
- 2.14. Fixed the issue where model data failed to display when loading 3DGS data in some cases;
- 2.15. Fixed the issue where the symbol "-" could not be entered in the email address when applying for a trial via email in the software;
- 2.16. Fixed the issue where point cloud display in registration mode was

incomplete when the number of Codata files exceeded 512;

- 2.17. Fixed the issue where the description of the "AI Coloring" function in the data calculation interface was unclear;
- 2.18. Fixed the inconsistency in HPC coloring logic between CoPre 2.9.3 and CoPre 2.9.1;
- 2.19. Fixed the issue where the processing duration and date recorded in the aerial triangulation modeling report were incorrect;