GeoCCP
GEOSAT Cloud Computing Platform

GeoCCP is a cloud computing solution for UAV aerial image processing. It integrates photogrammetry mapping, construction monitoring, and agricultural pattern recognition technology to solve problem in computing and analysis of UAV images. Users can just upload images to the platform to complete calculation, stitching, stacking, display and analysis.
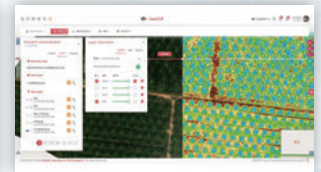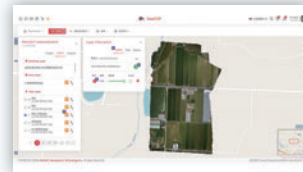
UAV Aerial Photo-stitching

Cloud computing solution for multi-source drone imagery, support all image formats commonly used in UAV systems, including GPS information imagery, external POS information imagery, multispectral imagery, file format containing TIFF, IMG, JPG and other commonly used geographic image formats, and provide multi-coordinate system formats for users to download and use.

Layer stacking display

GeoCCP is a computing solution with display table. The table presentation feature includes multi-project stacking analysis, stacking order adjustment, transparency, SWIPE, online tiles, and the relevant OGC open layer stacking service.
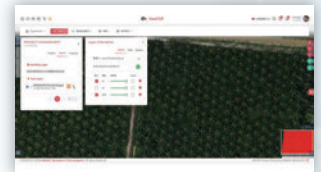
AI analysis function - crop recognition

Crop recognition function provides users with their own stacking calculation of the crop type, the system provides a fully automatic online evaluation, and provides the reliability analysis of relevant recognition.
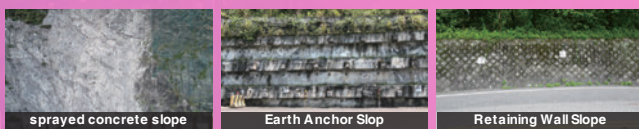
AI Analysis Function - Oil Palm Tree Counting

Through AI deep learning approach, GeoCCP provides oil palm tree counts and location coordinates. The computed results can be further evaluated for growth management.

Fully automatic slope monitoring and 3D difference analysis

GeoCCP offers a fully automated roadside slope monitoring solution that includes automatic calculation of 3D information for control points; and continuous change detection. In addition, multi-period 3D difference analysis is provided to evaluate local variation of roadside slope.
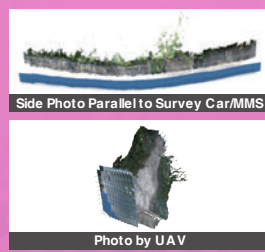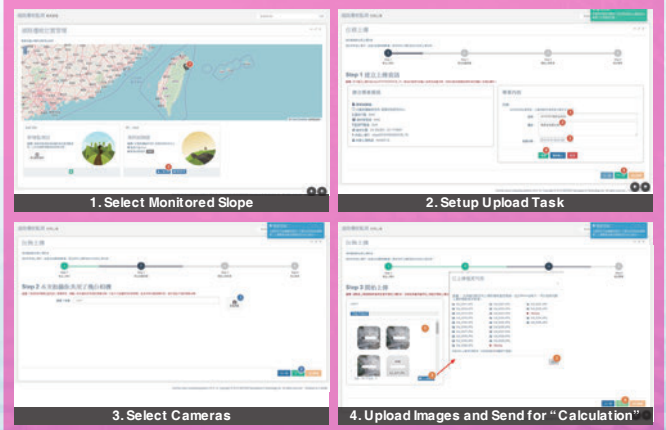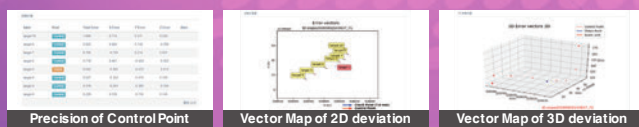
Step1 Choose Slope

sprayed concrete slope | Earth Anchor Slop | Retaining Wall Slope

Step2 Slope Setup

Control Mark Setup on Slope

Step3 Slope Photo

Side Photo Parallel to Survey Car/MMS

Photo by UAV

Step4 Upload to Cloud System

1. Select Monitored Slope | 2. Setup Upload Task

3. Select Cameras | 4. Upload Images and Send for "Calculation"

Step5 Precision of Control Point

Precision of Control Point | Vector Map of 2D deviation | Vector Map of 3D deviation

Step6 Measure Difference from 3D Point Cloud

Search/Inquiry 3D Point Cloud | Change Analysis of Point Cloud | Measure 3D Point Cloud