

**delair.ai**  
P L A T F O R M

The leading visual  
intelligence platform



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# Platform overview.

## Aggregate

Easily centralize all your data from any source in one platform

<b>Drone agnostic</b>	The platform is designed to aggregate, manage and analyze data from all professional drones
<b>Native compatible drone data</b>	UX11 RGB, UX11 Ag (Multispectral)
<b>Certified compatible drone data</b>	DJI Phantom 4 Pro series and Mavic 2 Pro series, Quantum Systems, Wingtra One
<b>Compatible drone sensors data</b>	Micasense Rededge-MX, Micasense Rededge-Mini, Micasense Rededge 3, Airinov multiSPEC 4C, Airinov PRI, Parrot Sequoia, Parrot Sequoia+, FLIR Tau 2, FLIR Vue Pro, FLIR Vue Pro R, RGB sensors
<b>Other compatible data inputs</b>	RGB georeferenced data-sets from land-based and handheld devices, such as DSLR cameras or smartphones. .las Point Clouds to standards 1.2 & 1.4, obtained from airborne LiDARs or ground-based laser scanners raw data. IoT sensor data

## Manage

Harness the power of visual data

<b>User management</b>	Assigned permissions based on specific user needs: manager, user, operator, contributor	View permissions, Upload/download data permissions, Manipulate data permissions
<b>Processing configuration</b>	Set your parameters and choose the best photogrammetry engine for your data processing	PIX4D Engine Agisoft Metashape Coordinate system: EPSG/ESRI, local coordinates GCP tagging RTK/PPK processing
<b>Georeferencing</b>	Advance geospatial referencing system	EPSG/ESRI coordinate system, local coordinates system
<b>Visualize</b>	Gain a holistic view of your sites, progress and operations across your company	Orthomosaic, Dynamic Digital Surface Model, Slope Map, Custom contours, Source images, Comparison view, Change map, 3D Mesh, 3D Point Cloud, Specific Overlays
<b>Collaborate</b>	Add comments to annotations and assign them to the right member of your team	Assign annotations, Notify, Review annotations
<b>Storage</b>	Secure and scalable storage capacity. Monitor your total data storage from the administration console: images, products, reference files	
<b>Archiving</b>	Secure cloud archiving , 24h SLA for data access from archive	

## Develop and integrate

Use delair.ai as a backend for your application, deploy custom analytics or exchange data with your information system

<b>APIs</b>	Interact with delair.ai from your platform, using the APIs from any programming language	Public APIs enable you to : access GIS data : rasters, vectors, point clouds, .... – launch analytics – manage projects, users – annotate data – - measure volumes and profiles – share raster tiles
<b>SDK</b>	Python SDK provides you with the boiler plate to use the APIs in Python and the ability to deploy custom analytics	Integrate custom analytics Leverage delair.ai computing resources

# Analyze

Proven ready-to-use applications for extracting business intelligence

<b>Annotate</b>	Draw annotations, add descriptions and tag them to easily find them	Spatial elements: point, line, poli-line, polygon	
<b>Measure</b>	After drawing annotations, get instantaneous measurements	Perimeter, surface area, volume, distance, elevation profile	
<b>OFF-THE-SHELF ANALYTICS</b>			
<b>MINES &amp; A.</b>	<b>Advanced stockpiles (M&amp;A)</b>	Automated inventory reporting toolset. View individual volumes, areas, and tonnage	Automated Stockpile identification and volume Stockpile location map, Stockpile inventory report Statistics dashboard
	<b>Haul roads</b>	Automatically extracts the most currently geometry and conditions of your haul roads	Haul road centerlines, Haul road widths, Haul road cross falls, Haul road grade
	<b>Safety &amp; higwalls</b>	Automatically extracted safety analytics	Highwall heights, crests, toes – Safety block heights – Safety berm crest, toes and heights
<b>AGRICULTURE &amp; FORESTRY</b>	<b>Advanced scouting maps</b>	Get an overview of your field at the macro-field level	NDVI map - Crop vigor, MCARI2 map- Green biomass, NDRE map - Chlorophyll content, VARI map - Greenness, PRI map - Photochemical reflectance index, CCCI map - Chlorophyll concentration, CIR map - Colored infrared, MSAVI 2 map - Soil adjusted crop vigor
	<b>Emergence characterisation</b>	Automatically calculate the % of green/leaves to characterize vigor	Emergence layer, Emergence % per microplot
	<b>Field vectorisation</b>	Automatically define geolocation of field boundaries and surfaces	Field boundaries
	<b>Flowering characterisation</b>	Automatically calculate the % of flowering	Emergence layer, Emergence % per microplot
	<b>Fraction of vegetation cover</b>	Automatically measure the fraction of ground covered by vegetation	Biomass mask, FCover per microplot
	<b>Gaps and count</b>	Automatically determines plant count and gaps	Gap length, Position of gap at line end or not, Plant count
	<b>Microplot vectorisation</b>	Automatically define geolocation of microplot boundaries	Microplots layer
	<b>Plant height</b>	Automatically estimate plant height	Vegetation height map
	<b>Statistics plots</b>	Automatically extracted statistics around scouting maps	Min, Max, Average, Standard deviation, Variance
	<b>Stay green</b>	Automatic assessment of crops remaining green late in the season	Stay green layer Stay green per microplot
	<b>POWER &amp; UTILITIES</b>	<b>Basic RGB classification</b>	Classification of objects from a RGB dataset
<b>Advanced LiDAR point classification</b>		Classification of objects from a point cloud	9 classes (Ground, Vegetation, Poles, Conductors, Buildings, Crossing Lines, Roads, Railways, Custom class)
<b>Thermal mapping</b>		Orthomosaic generated from thermal LWIR pictures	Thermal orthophoto
<b>Solar plant thermal inspection</b>		Automatically detect hotspots on solar plants	Georeferenced map with anomalies
<b>Basic LiDAR point cloud classification (P&amp;U)</b>		Classification of objects from a point cloud	5 classes (Ground, Vegetation, Poles, Conductors, Custom class)
<b>Vectorized conductors</b>		Automatically generate a 3D geo-referenced vector file of power lines catenaries	Vectorized conductors files
<b>Vegetation encroachment</b>		Automatically detect vegetation surrounding powerlines	Text collision report, Map collision report, Collision detailed report, Falling tree report, Pruning report
<b>CUSTOM ANALYTICS</b>			
<b>Object detection</b>	Automatically detect and classify different classes of objects from an RGB orthophoto	Tagged detected objects in 2D layers	

