

delair.ai
P L A T F O R M

The leading visual
intelligence platform



Platform overview.

Aggregate

Easily centralize all your data from any source in one platform

Drone agnostic	The platform is designed to aggregate, manage and analyze data from all professional drones
Native compatible drone data	UX11 RGB, UX11 Ag (Multispectral)
Certified compatible drone data	DJI Phantom 4 Pro series and Mavic 2 Pro series, Quantum Systems, Wingtra One
Compatible drone sensors data	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
Other compatible data inputs	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

User management	Assigned permissions based on specific user needs: manager, user, operator, contributor	View permissions, Upload/download data permissions, Manipulate data permissions
Processing configuration	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
Georeferencing	Advance geospatial referencing system	EPSG/ESRI coordinate system, local coordinates system
Visualize	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
Collaborate	Add comments to annotations and assign them to the right member of your team	Assign annotations, Notify, Review annotations
Storage	Secure and scalable storage capacity. Monitor your total data storage from the administration console: images, products, reference files	
Archiving	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

APIs	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
SDK	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

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

