

WANT TO KNOW WHAT WE KNOW ABOUT YOUR FOREST?

#forestAi

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KNOW 100% OF YOUR FOREST with #forestAi.







TECHNOLOGY

- Highly-specialized #forestAi technology
- Aerial + satellite data analysis
- Trained on many million trees
- Super high accuracy >95%
- Cloud-based, accessible 24/7
- Easy to use

ABOUT SKYLAB

- German engineering
- Dedicated engineer assigned to each project
- Rigid quality control
- Tailored Ai for your specific needs

COMMERCIAL FORESTRY



MAX. TIMBER

FOREST CONSERVATION

MAX. PROTECTION

FOREST CARBON

MAX. CARBON

OUR CUSTOMERS WORLDWIDE

- **FOREST CORPORATES** ٠
- **INVESTMENT FUNDS** ٠
- **CONSERVATION MANAGERS** ٠
- **CARBON DEVELOPERS** ٠
- **STATE FORESTS** ٠
- NGOs



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ARE YOU COMPETITIVE? YOUR BENEFITS WITH #forestAi



STAY AHEAD. STAY COMPETITIVE!

FOUR EXAMPLES SHOWING YOUR BENEFITS WITH #forestAi

ACT ON TARGET





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ORTHOFOREST+ Forestry-optimised orthophotos

Just upload your raw aerial image data to our online platform, the SKYLABcloud

Our orthophotos are specifically optimised for forestry settings

No distortions or fragments, as sometimes seen in standard orthoprocessing softwares

No need to handle or store large file sizes

From just \$29/month!





OPTIMIZED STOCKING

Maximize land utilization and productivity

- Count all trees
- Canopy cover / gaps
- Targeted thinning or harvesting
- Optimum stocking density
- Cut sampling by 100%
- Re-map stand boundaries
- Due diligence
- Fire-risk management

FACTSHEET

ALL forest typesDATA from drones, planes or satellitesNO reference data needed



CUSTOMER EXAMPLES: TREE COUNT AND CANOPY COVER / GAP ANALYSIS

TREE COUNT



AUSTRALIAN PINE GROWER

Deviation of +/-20% from optimum density. Targeted thinning through digital tree count.

Tree counting from plane and very high resolution satellite data in all age classes. Pre-thin tree count enables optimization of stocking density for maximum productivity. Yield prediction for downstream planning.

STOCKING DENSITY



DENSITY MAPS

Stems per acre in each 60ft x 60ft grid cell. Reveals variations for better planning.

CUSTOMER BENEFITS:

CANOPY COVER / GAP



RUBBER PLANTATION, EAST ASIA

Canopy/gap analysis for quick overview of stocking variations – find poor-growth hotspots for swift decision making.

- > No sampling, 100% coverage
- > See all variations in stocking & canopy cover
- > Targeted thinning & harvesting
- > 20% productivity increase



CANOPY CHANGE

Regular monitoring of changes in forest canopy cover

- Monitor harvesting ops
- Quantify storm or fire damage
- Detect illegal logging
- Check contractor performance
- Better plan your woodflow

Satellite data for monthly, quarterly or annual measurements and reporting of canopy loss or change.

Plan and prioritize recovery and replanting.

FACTSHEET ALL forest types DATA satellites NO reference data needed



CUSTOMER EXAMPLES: CANOPY CHANGE ANALYSIS (SATELLITE)



NEW ZEALAND PINE GROWER

Continuous harvesting operations by contractors in different locations. Traditional monitoring by walking perimeter with GPS.

Satellite-based quantification saves several days every month and provides precise area measurement.

ILLEGAL LOGGING DETECTION



ILLEGAL LOGGING IN ROMANIA, NGO

Finding illegal logging activities in legal concession areas with precision of 0.1 ac.

DAMAGE ASSESSMENT



US PINE GROWER AFTER HURRICANE

Detect and quantify damage, differentiate damage type, prioritize recovery action and estimate wood flows.

CUSTOMER BENEFITS:

- Regular update on canopy change
- > Precise measurement of area
- Able to act fast and on target
- > Reduce loss and damage

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FOREST HEALTH

Keeping a constant eye on your forest

- Find health and change hotspots
- Fast and targeted response
- Minimize damage
- Reduce costs by up to 80%

Increasing stress from a changing climate means forest health threats are more serious and forest change is faster than ever.

Regularly monitor your entire forest from space for annual, quarterly or monthly assessments of the health status of your forest.

Focus your actions only on the affected areas. Minimize terrestrial surveillance and chemical input.

FACTSHEET

ALL forest types DATA satellites NO reference data needed



CUSTOMER EXAMPLES: FOREST HEALTH (SATELLITE)



BRAZILIAN EUCALYPTUS GROWER

150,000-acre Eucalyptus plantation in Brazil, with severe fungal infection on 1,250 acres.

#forestAi **cost \$500** and identified disease hotspots. Targeted spraying **saved \$20,000** and reduced environmental load. 6 weeks later analysis shows full recovery of canopy.

FOREST CARBON PROJECT, COLOMBIA

Full transparency on forest carbon reporting, yield projections, verification planning and risk management.

CUSTOMER BENEFITS:	> Minimal or no terrestrial surveillance
	> 100% coverage of all hotspots
	> 80% cost savings
	> Full recovery, full transparency

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MAXIMIZING SEEDLING SURVIVAL

Count ALL seedlings

- Survival count for entire stand
- Weed maps
- Crown diameter measurement
- Vitality maps
- See variations, understand causes
- Targeted replanting
- Weed management, fertilisation
- Increase productivity by 20%
- Eliminate sampling 100%

Focus on the problem areas and make sure that the stand is fully stocked in this vital establishment phase.

FACTSHEET

ONLYplantations for timber or carbonDATAfrom drones or very hi-res planeNOreference data needed



CUSTOMER EXAMPLE: SEEDLING SURVIVAL

STOCKING DENSITY GRID MAPS



BRAZILIAN EUCALYPTUS GROWER

Customer counted 97% survival from terrestrial sampling (1% of total area)

SKYLAB count of all seedlings revealed survival rate of only 82%.

WEED MAP



Strong, localised weed presence coincides perfectly with areas of poor seedling survival.

Targeted action and replanting increased survival to 99%. >20% productivity increase.

CUSTOMER BENEFITS:

CROWN AREA VITALITY



AUSTRALIAN PINE GROWER

Crown area measurement and vitality assessment for targeted fertilization and long term productivity planning.

- > No sampling, 100% coverage
- > See variability, targeted replanting
- > Targeted weed management & fertilization
- > Increase productivity by 20%

CONSERVATION / CARBON TRANSPARENCY



Monitoring composition, diversity, health and change on large scale areas. Fire break maintenance.

OPTIMIZED ORTHOPHOTO (ORTHOFOREST+)



Perfect orthophoto processing from aerial imagery optimized for forestry, little or no gaps or fragments.

PRODUCTIVITY CLASSIFICATION



INVASIVE SPECIES



Detect and quantify the extent of invasive species colonization within conservation forest or plantations.

VOLUME INVENTORY



Customized full volume inventory for timber or carbon with optimized ground sampling.

STRATIFICATION / LAND USE



Land use and vegetation classification for investment due diligence or better conservation management.



Detect and quantify lying merchantable timber after harvesting.



Predict variable site productivity from drone or satellite imagery for planning and targeted action.

NURSERY COUNT



Frequent and precise counting and survival assessment of nursery seedlings.



COSTING YOU LESS THAN THE PRICE OF 2 SEEDLINGS

PRICING PER ACRE BIGGER AREA, LOWER PRICE

SIMPLE, ANNUAL SUBSCRIPTION CONTRACTS

PRICES RANGE FROM \$1.50 TO AS LITTLE AS \$0.10

DON'T TRY THIS AT HOME!

Unless you want to spend 30 man-years R&D and \$3m on training Convolutional Neural Networks with 100m trees!

GET STARTED





COUNTING

- Trees
- Seedlings
- Weed & Vitality
- Canopy / Gap

• Orthoforest+



CHANGE MONITOR

- Health
- Damage
- Harvest / Illegal Logging
- Canopy Change
- Stratification / Land Use
- Productivity Classes
- Conservation / Invasive Species



Is this viable for you? Will guide you to find out:

Select solution, define area and size (AOI kmz, shape)
We'll do a pre-check and give you our pricing
Get started

www.skylabglobal.com hello@skylabglobal.com



Know 100% of your forest

#precisionforestry #forestAi

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