# Comprehensive Information by Sensor Fusion onboard Satellites

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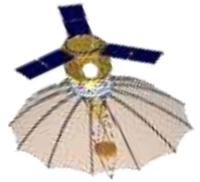
# Satellite Imagery Ecosystem

| Satellite Systems | Data | Applications |
| --- | --- | --- |
|  | Companies work on gathering data from hardware (sensors) to capture an Area of Interest |  |
| Various entities work on manufacturing systems for satellites and launching them |  | Data is then analysed to develop a positive economic impact across industries |

# Deciding Satellite Imagery Today



OR

**Optical data**

Color In Context
Enables Feature identification

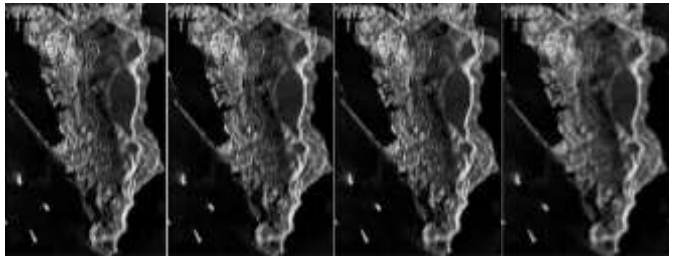
**Radar data**

Grey Scale imagery
Difficult to Identify Features

| Day | | Night | |
|---|---|---|---|
| Clear | Cloudy | Clear | Cloudy |

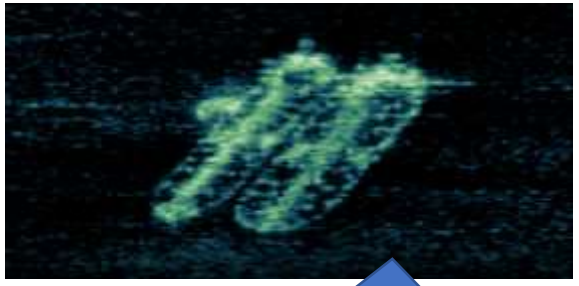
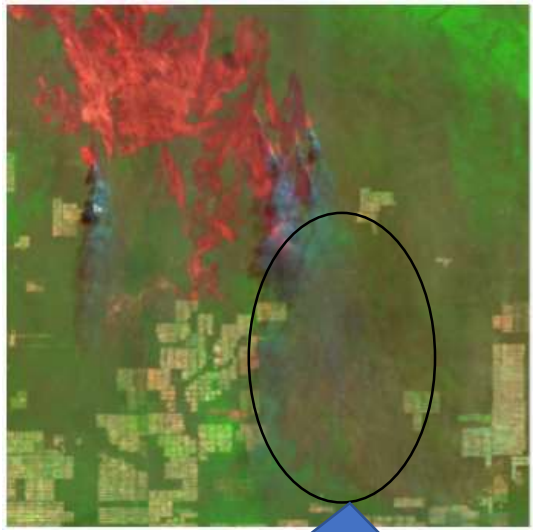
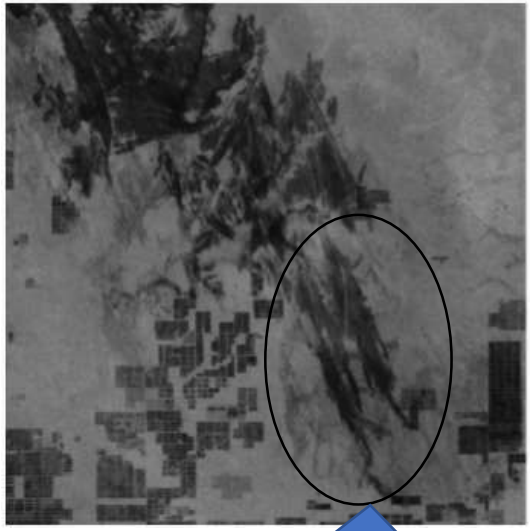
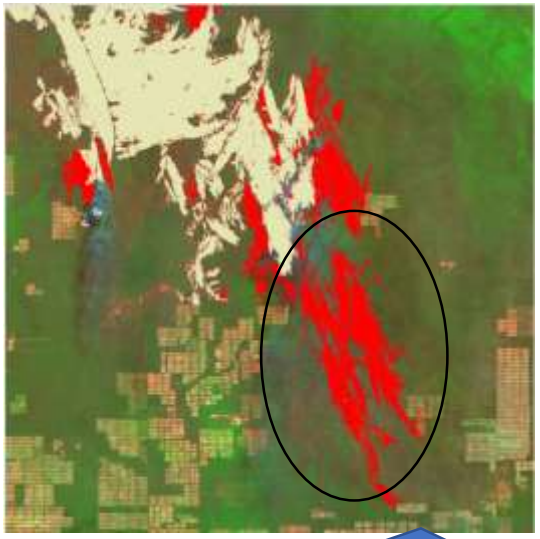
Low Availability

| Day | | Night | |
|---|---|---|---|
| Clear | Cloudy | Clear | Cloudy |



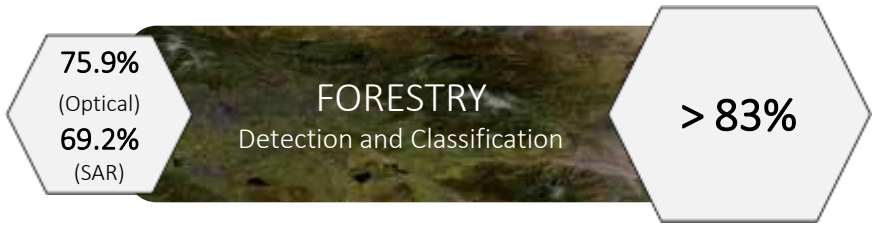
High Availability

# How does Fusion help?

| | Optical Image | SAR Image | Fused & Analysed Image |
|---|---|---|---|
| Marine Monitoring |  |  |  |
| | • Covered with clouds<br>• Can identify ship attributes, if image is clear | • Not covered with clouds<br>• Can detect, but not identify ships | • Can detect, locate, and identify activities too |
| | Optical Image | SAR Image | Fused & Analysed Image |
| Forest Fire Monitoring |  |  |  |
| | • Covered with smoke<br>• Detects fire situations | • Not covered with smoke<br>• Situation seems normal; Can't detect fire | • Can detect fires and also go through clouds<br>• Helps in tracking & predicting fire progression |

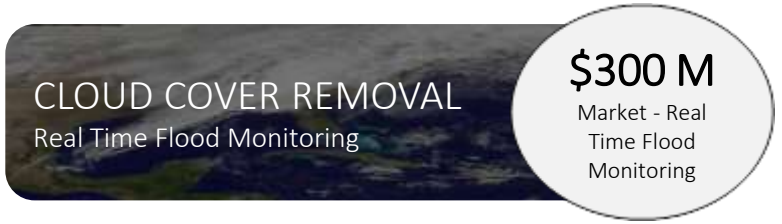
# AI Boosting Capabilities

## Unlocking the Potential
DATA FUSION





## 1 + 1 > 2
NOVELTY DATA PRODUCTS

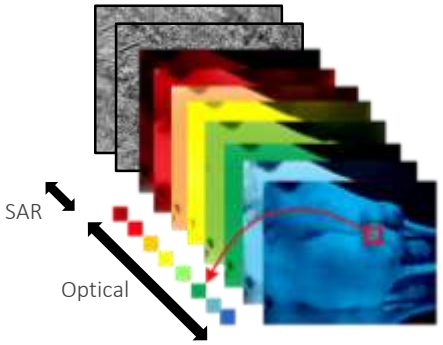




# GalaxEye's Solution

## Satellites equipped with "Drishti Sensor"

Microsatellites with sensor capabilities of both **SAR & Optical** sensing, coupled with **Edge Computers**




Synchronised Sensor Fused Dataset obtained "On the Edge"

Equipped with Edge Computers, making them "Smart Satellites"

Efficient Constellation of 15 Satellites orbiting the Earth

Thank you!