



*GLOBAL PERSISTENT MONITORING SERVICES
FOR THE ENERGY AND DEFENSE SECTORS*

Current Energy Infrastructure Monitoring is costly, subjective, and ineffective.

OSK uses hyperspectral satellites to provide a vertically integrated, scalable solution for global, persistent, objective monitoring.

OSK has captured initial monitoring services contracts with over a dozen of the largest pipeline operators in North America.

Presently finalizing \$16M Series A led by Temasek, along with a \$16M contract with the US Air Force.

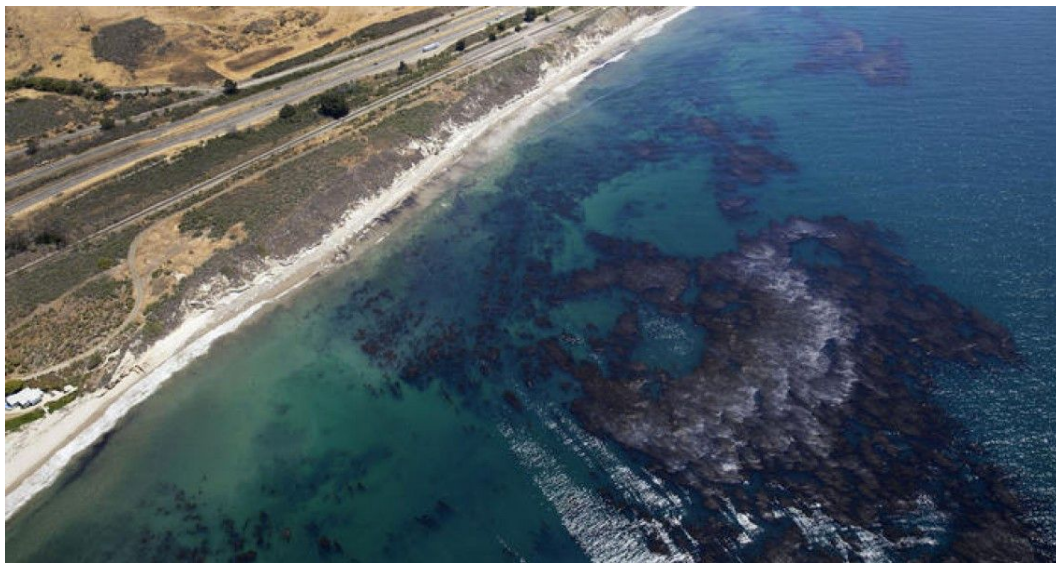


PIPELINES ARE EVERYWHERE, AND THEY'RE 60 YEARS OLD

3

Pipelines are responsible for 40% of US methane leaks (130 MMT CO₂e)

Pipeline incidents have caused over 500 deaths & 2500 injuries since 1990



Santa Barbara



San Bruno



Bellingham





Monitoring Platforms
2.7M kilometers of pipeline

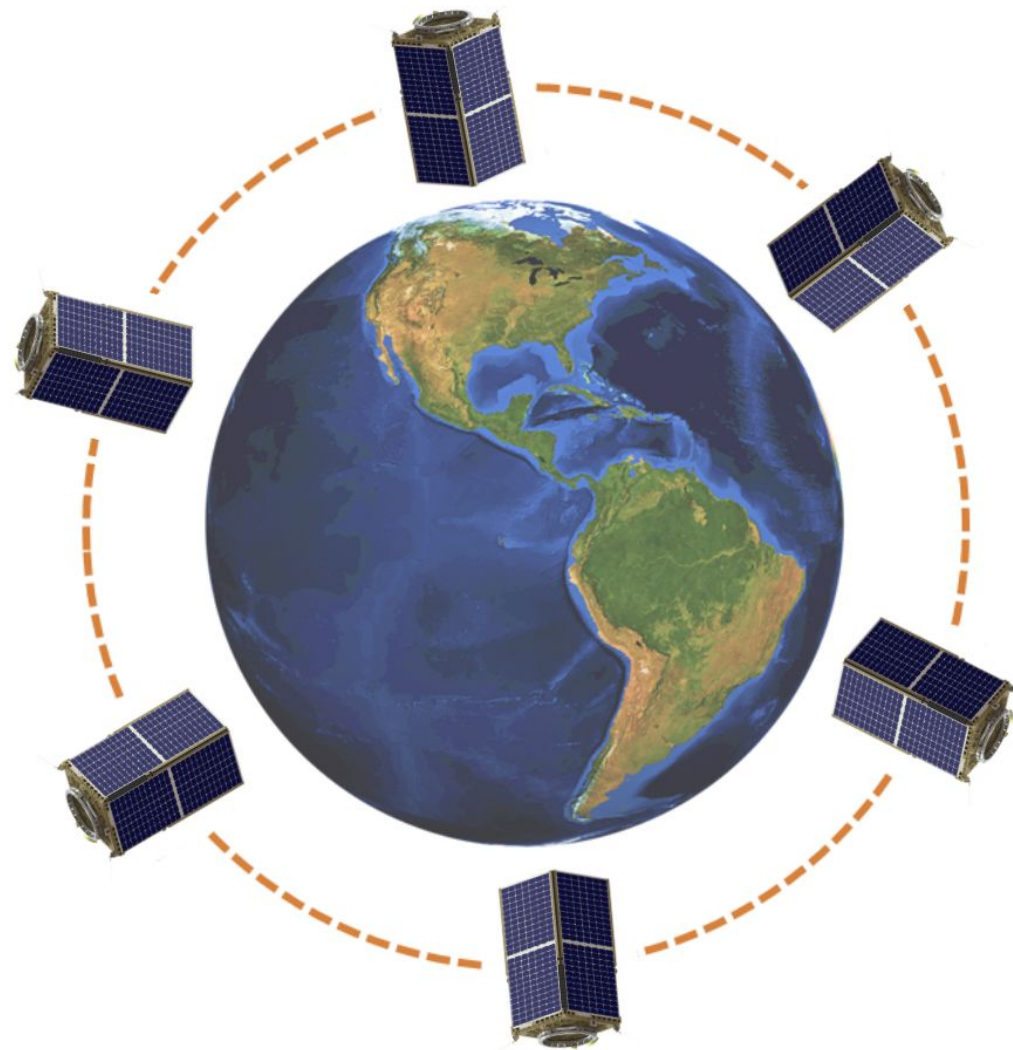


Subjective Monitoring
This is what operators see

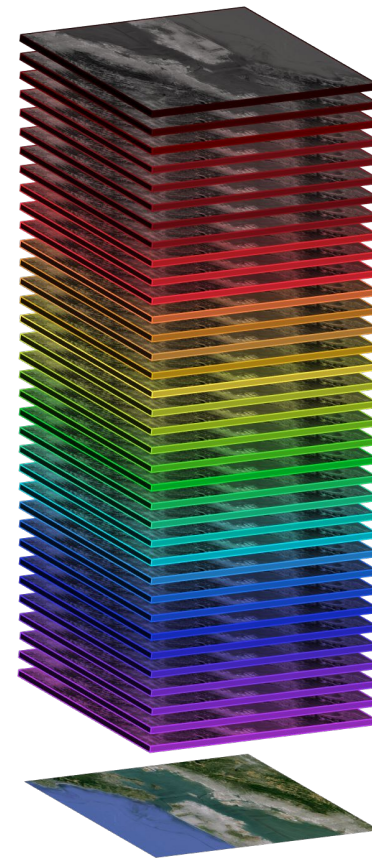
Date	Observation Report	Method	Time	Reported To:
1/1/2019	No previously unreported activity.	Phone	12:08 PM	Name
1/8/2019	No previously unreported activity.	Phone	11:53 AM	Name
1/15/2019	No previously unreported activity.	Phone	10:30 AM	Name
1/22/2019	No previously unreported activity.	Phone	2:11 PM	Name
1/29/2019	No previously unreported activity.	Phone	1:17 PM	Name
2/5/2019	No previously unreported activity.	Phone	12:30 PM	Name
2/12/2019	No previously unreported activity.	Phone	11:31 AM	Name
2/19/2019	No previously unreported activity.	Phone	11:27 AM	Name
2/26/2019	No previously unreported activity.	Phone	2:17 PM	Name
3/5/2019	No previously unreported activity.	Phone	11:27 AM	Name
3/12/2019	No previously unreported activity.	Phone	9:38 AM	Name
3/19/2019	No previously unreported activity.	Phone	10:48 AM	Name
3/26/2019	Excavator parked @Location	Phone	11:55 AM	Name

Reporting
This is what operators get

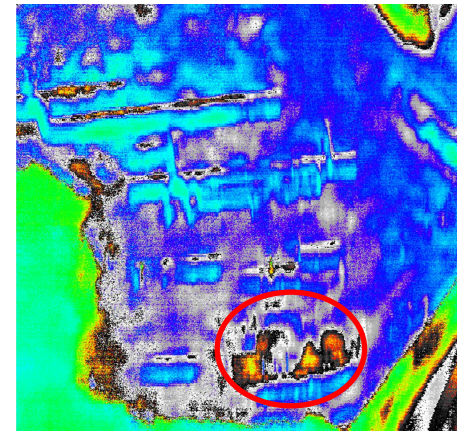




Orbital Sidekick
HSI Satellite Constellation
Daily Monitoring

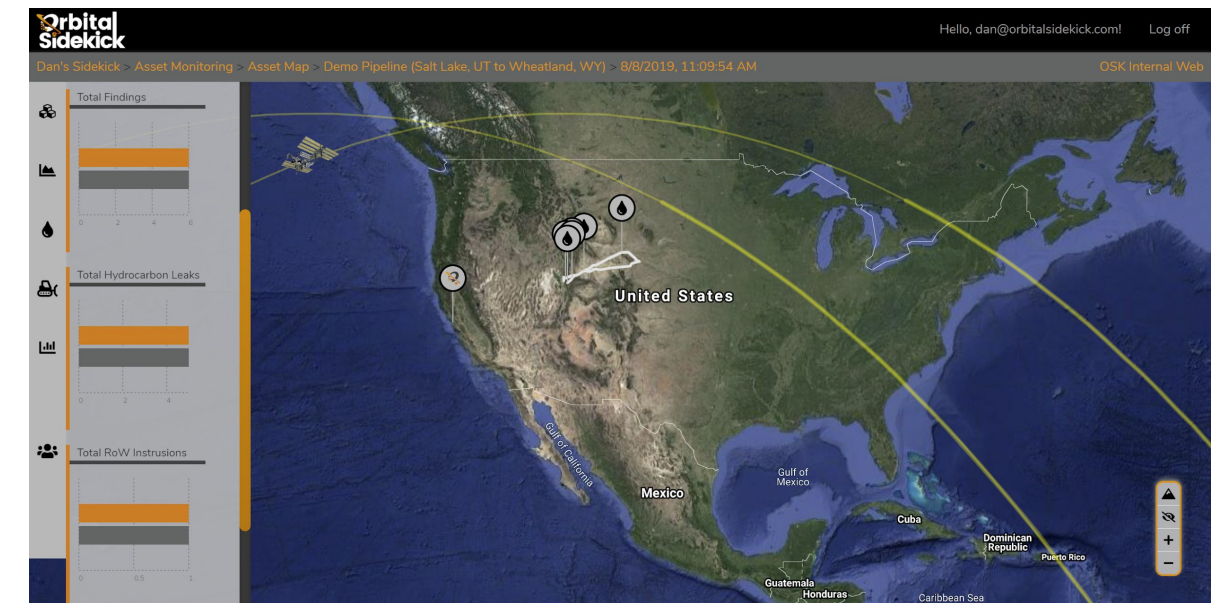


Hyperspectral Image
Hydrocarbon Detected



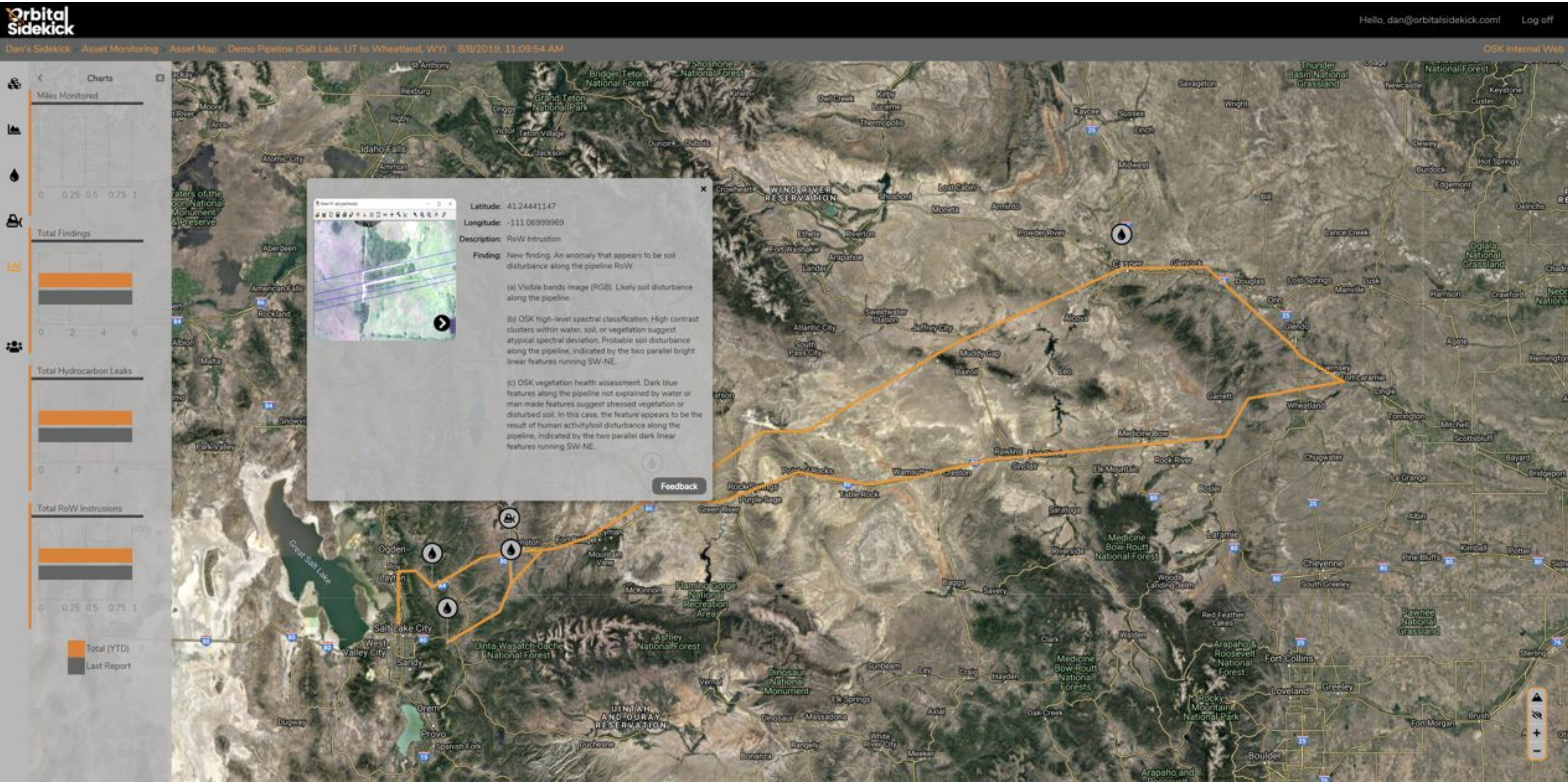
RGB Image
No Hydrocarbon Detected

Spectral Intelligence™
Proprietary Chemical
Fingerprinting



SIGMA™ User Platform
Global Monitoring Application



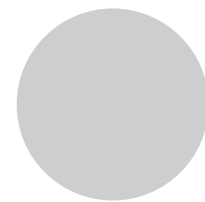


OSK's proprietary analytics platform and satellite payload architecture provides space-based monitoring solutions powered by hyperspectral imaging (HSI). OSK's unique radiometric and change detection capability enables unparalleled target monitoring services for both commercial and defense users on a global scale.

Utility patent for pipeline monitoring using hyperspectral sensors on aerial and space platforms:

"Aerial and Space-Based Hyperspectral Imaging System and Method for Hydrocarbon and Chemical Industry Regulatory Compliance, Leak Detection and Product Speciation"

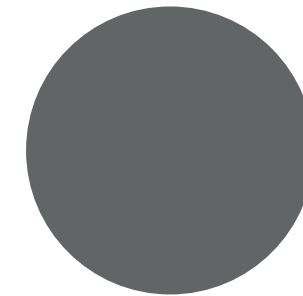




\$2.1B

REGULATORY COMPLIANCE

Was the pipeline monitored per regulation?
Is the pipeline leaking?
Are there any encroachments?



\$12B, 8% CAGR

SAFETY & MONITORING

What is the scope of the spill?
Were the remediation efforts successful?
Are there any security threats?





SIGNED MSAs

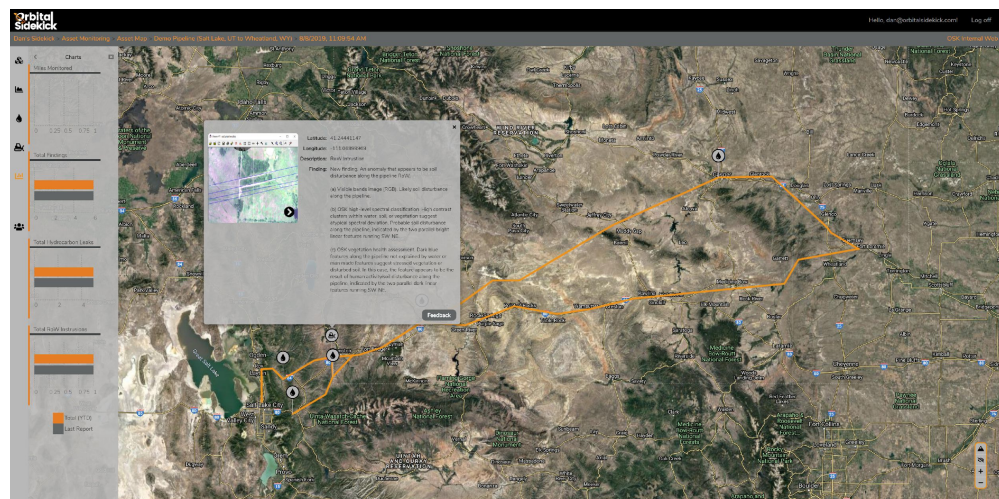


\$600K COMMERCIALIZATION INVESTMENT



DEFENSE





6 SATELLITES

TOTAL COSTS (INC LAUNCH)

\$24M

REVISIT RATE

DAILY

SPECTRAL RANGE

400 – 2500 NM, 512 BANDS

GSD

5 METERS

SPACECRAFT MISSION LIFE

5-7 YEARS

PIPELINES MONITORED (100% UTILIZATION)

900,000 KM/DAY

POTENTIAL PIPELINE REVENUE VIA SIGMA

>\$600M /YR

ROI

1 MONTH



We have recently closed a **\$16M Series A** and **\$16M in non-dilutive Air Force funding** to launch 6 spacecraft, hire new staff, and scale our SIGMA platform for new commercial markets

\$4.7M SERIES SEED - 2018

Grow Team from 2 to 8

Launch First Space Mission to ISS

Develop First Satellite Mission

Release SIGMA Beta

Grow Sales Pipeline

\$16M SERIES A - 2021

Grow Team from 8 to 22

Launch 6 Spacecraft

Scale SIGMA to Capture \$600M ARR

Grow Sales Pipeline

24 Months Runway (w/o Revenue)



A vital national security need for our specific technology exists within the US Air Force and the greater intelligence community.

The US Air Force is **MATCHING** our capital fundraise for the Series A.

Potential Phase III sole-source contract to follow.

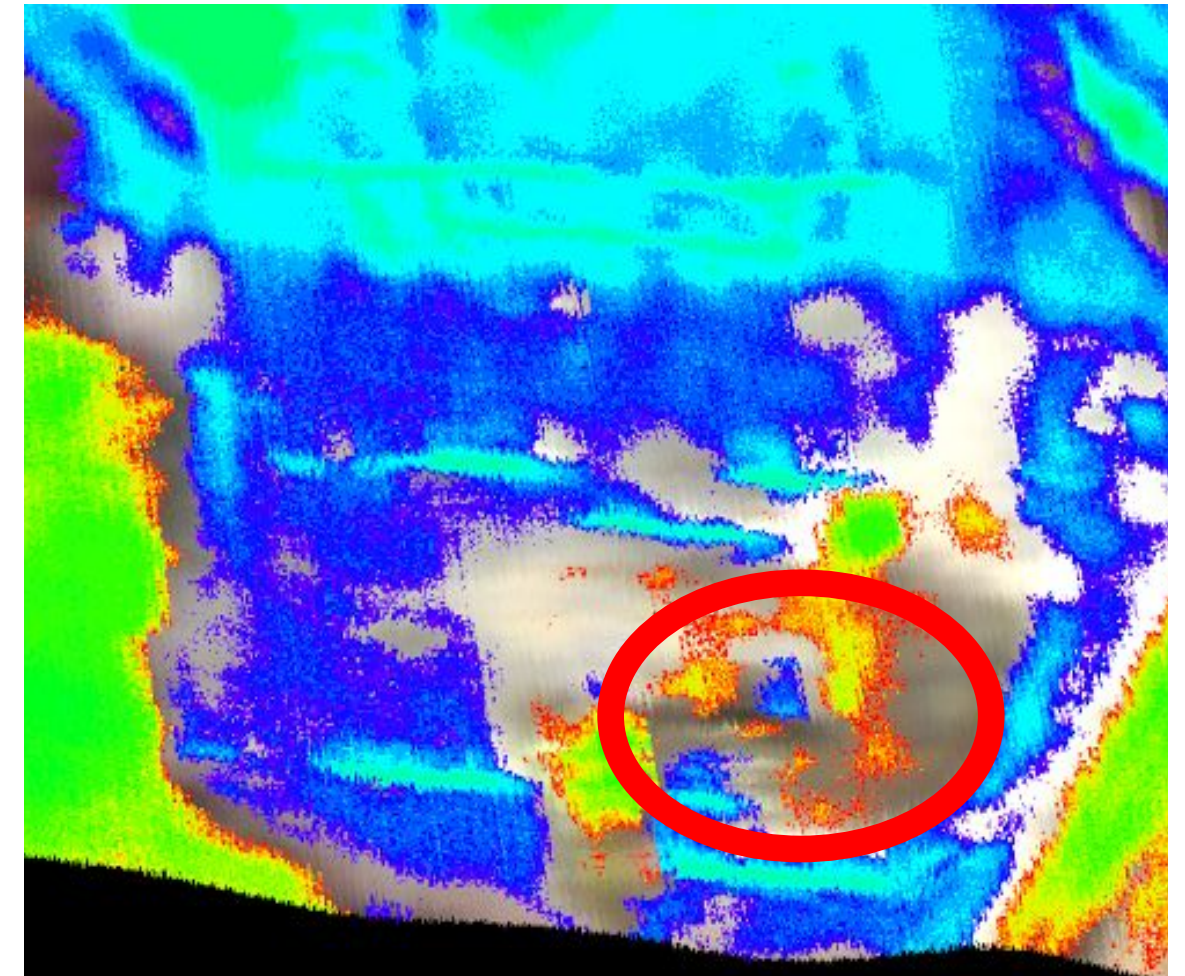
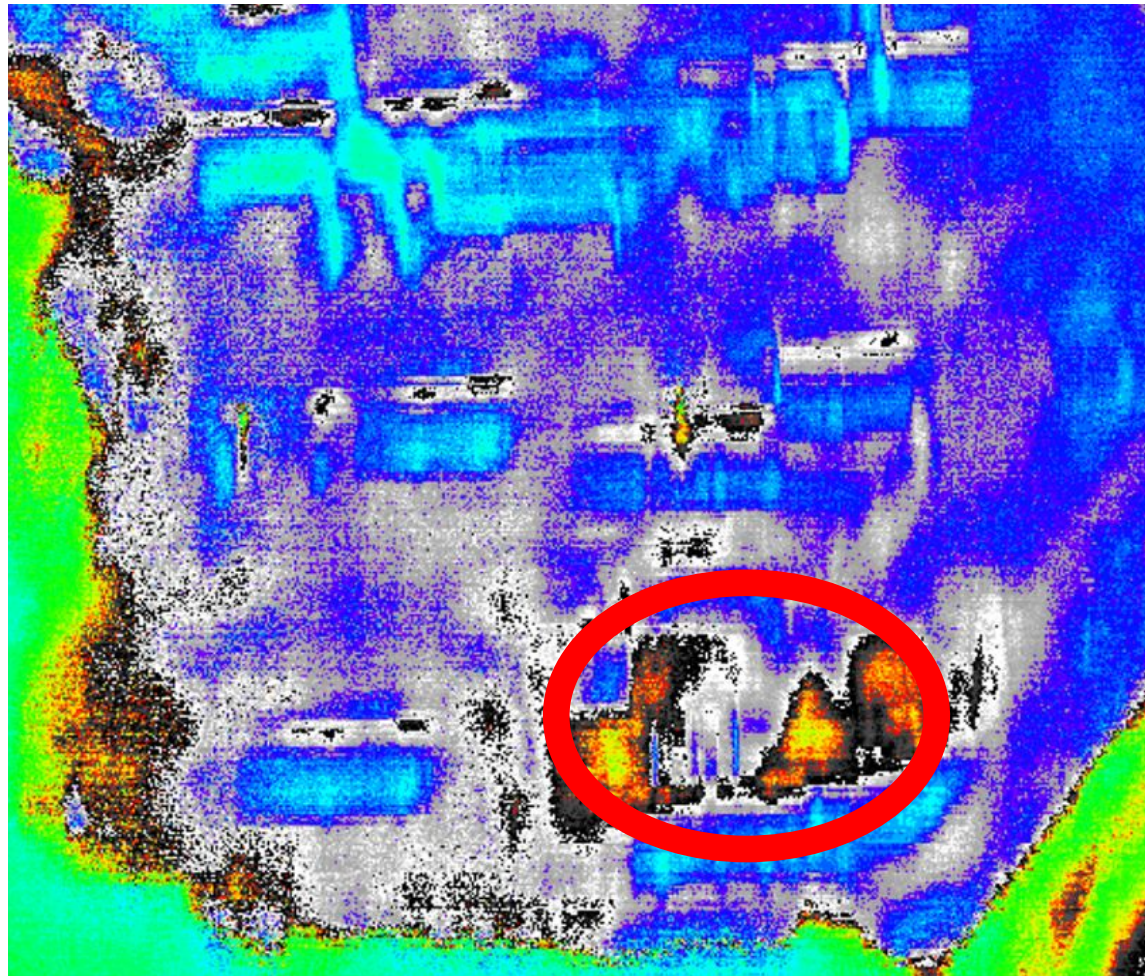
Enables:

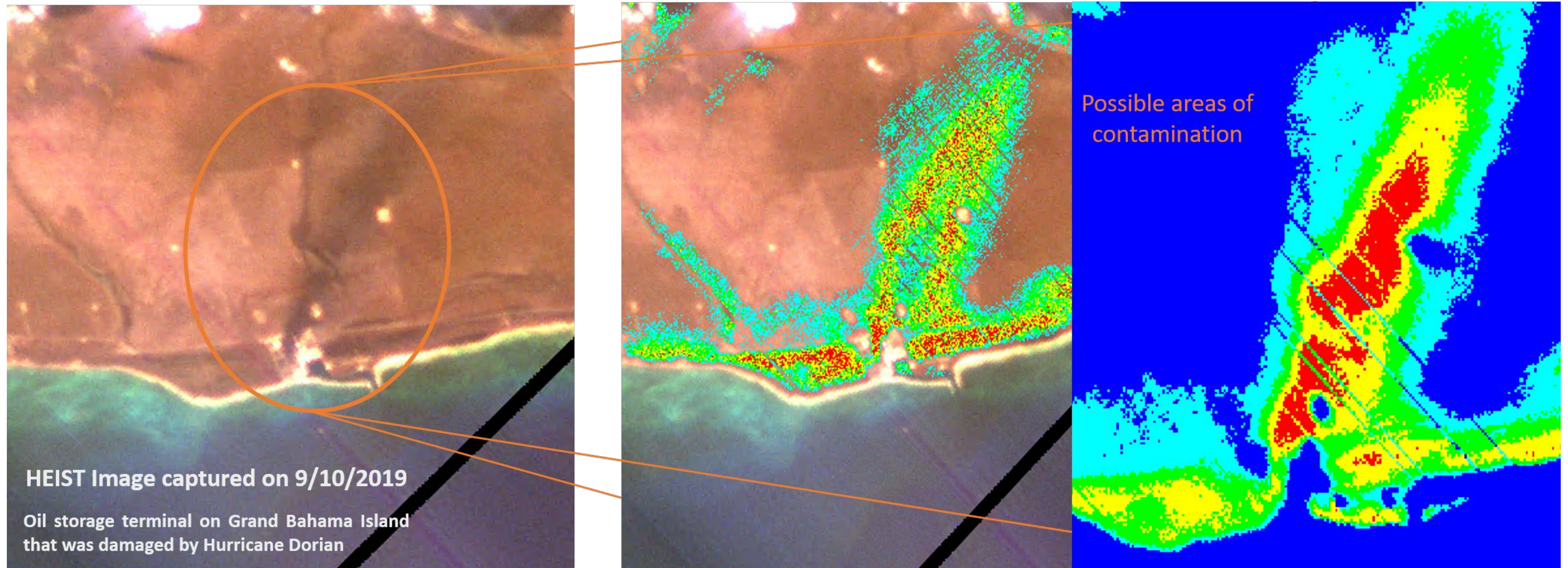
Launch 6 Satellites in 2021/2022 for Daily Target Revisit
Scale Geospatial Solutions



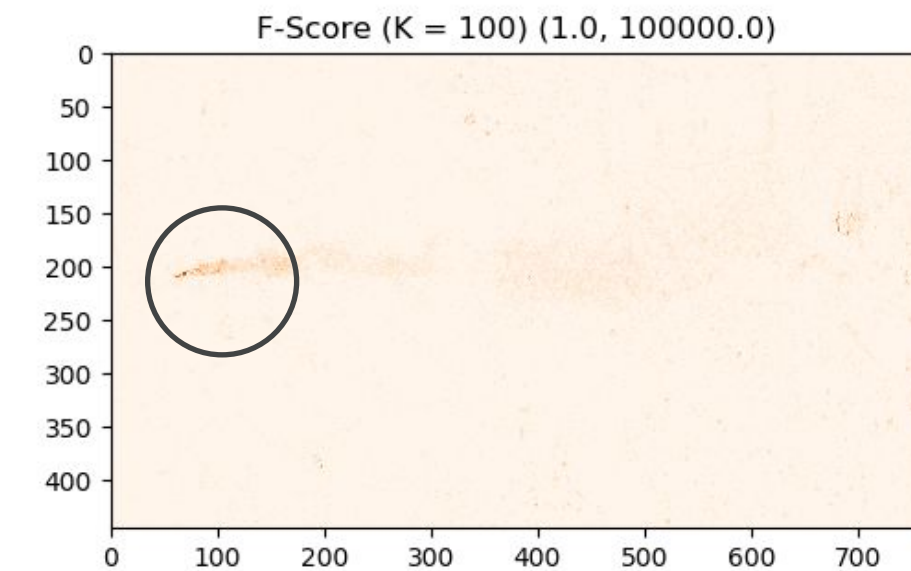
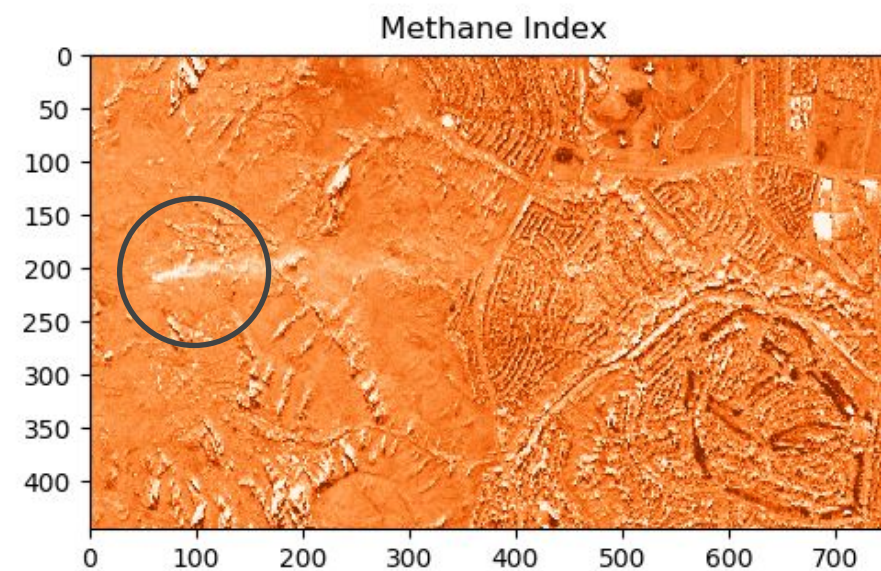
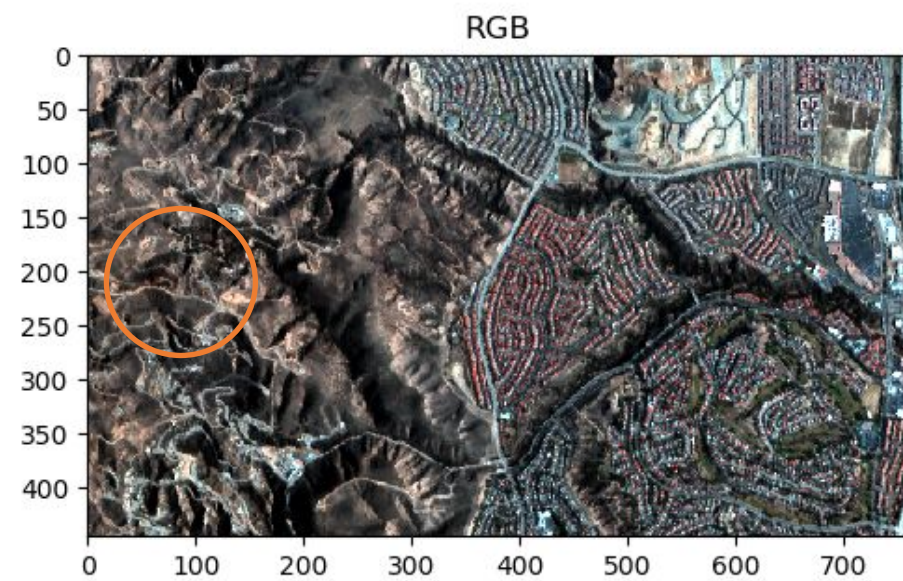


Underground Gas Leak – Discovery and After Repair

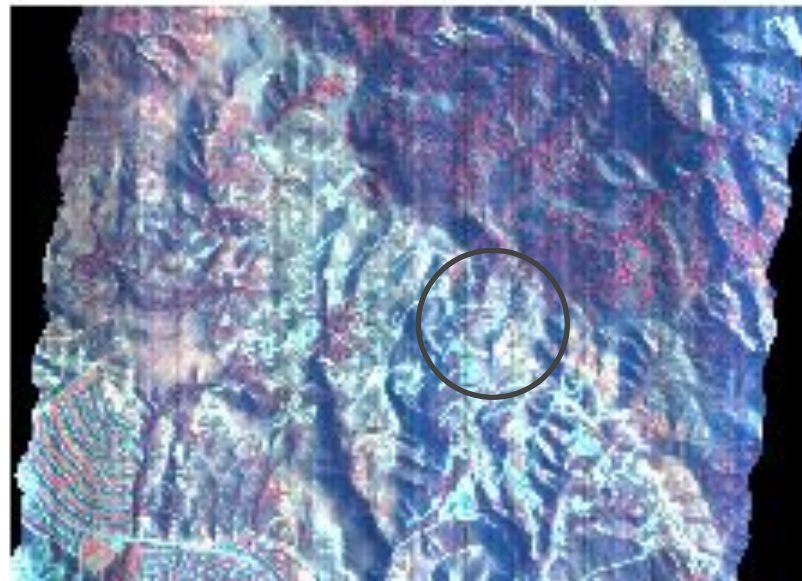




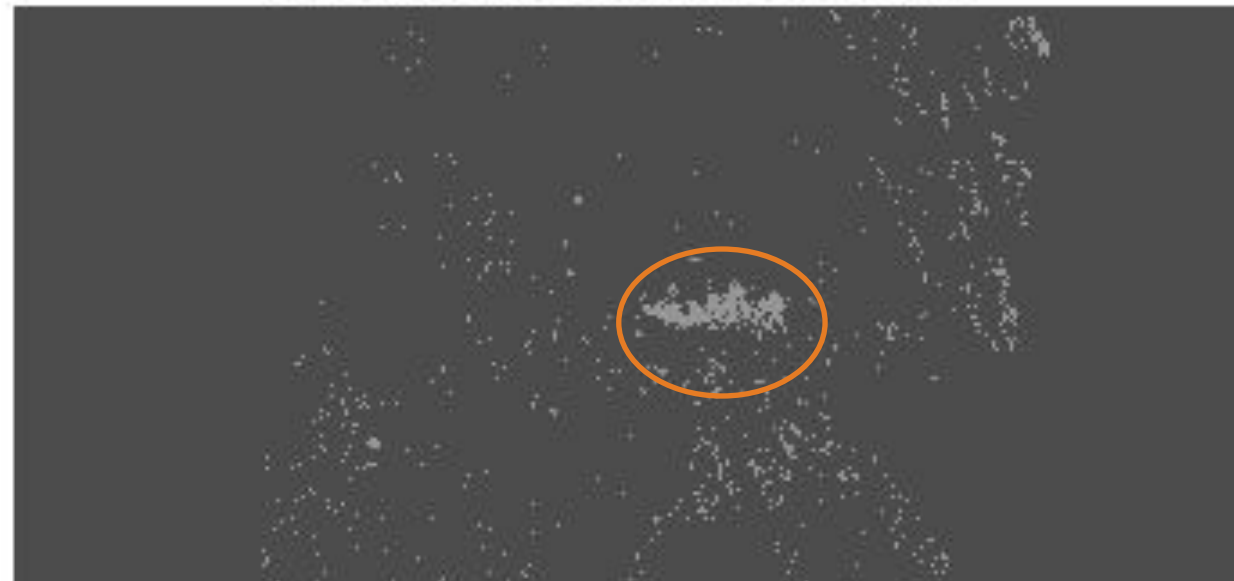
OSK-developed processes using traditional approaches

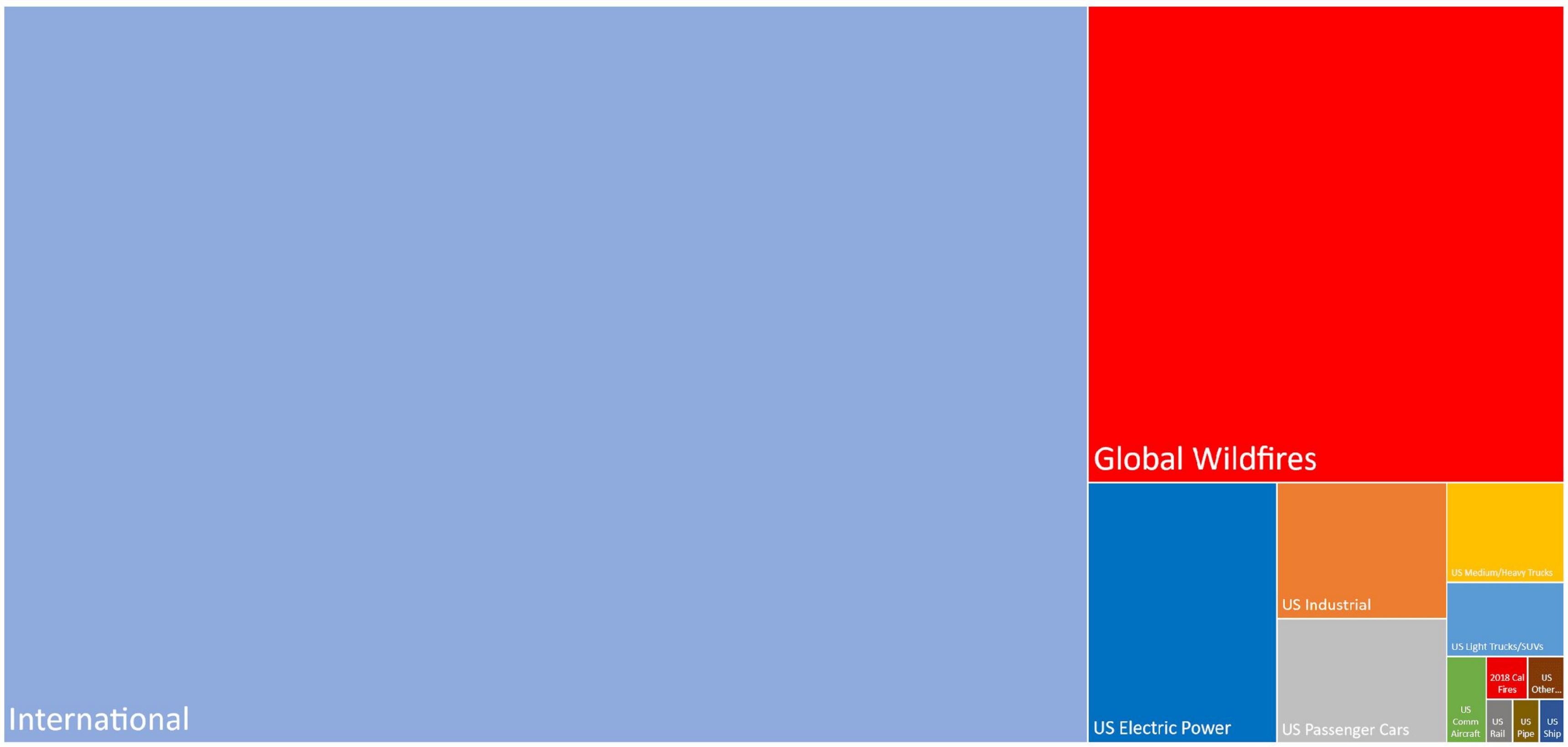


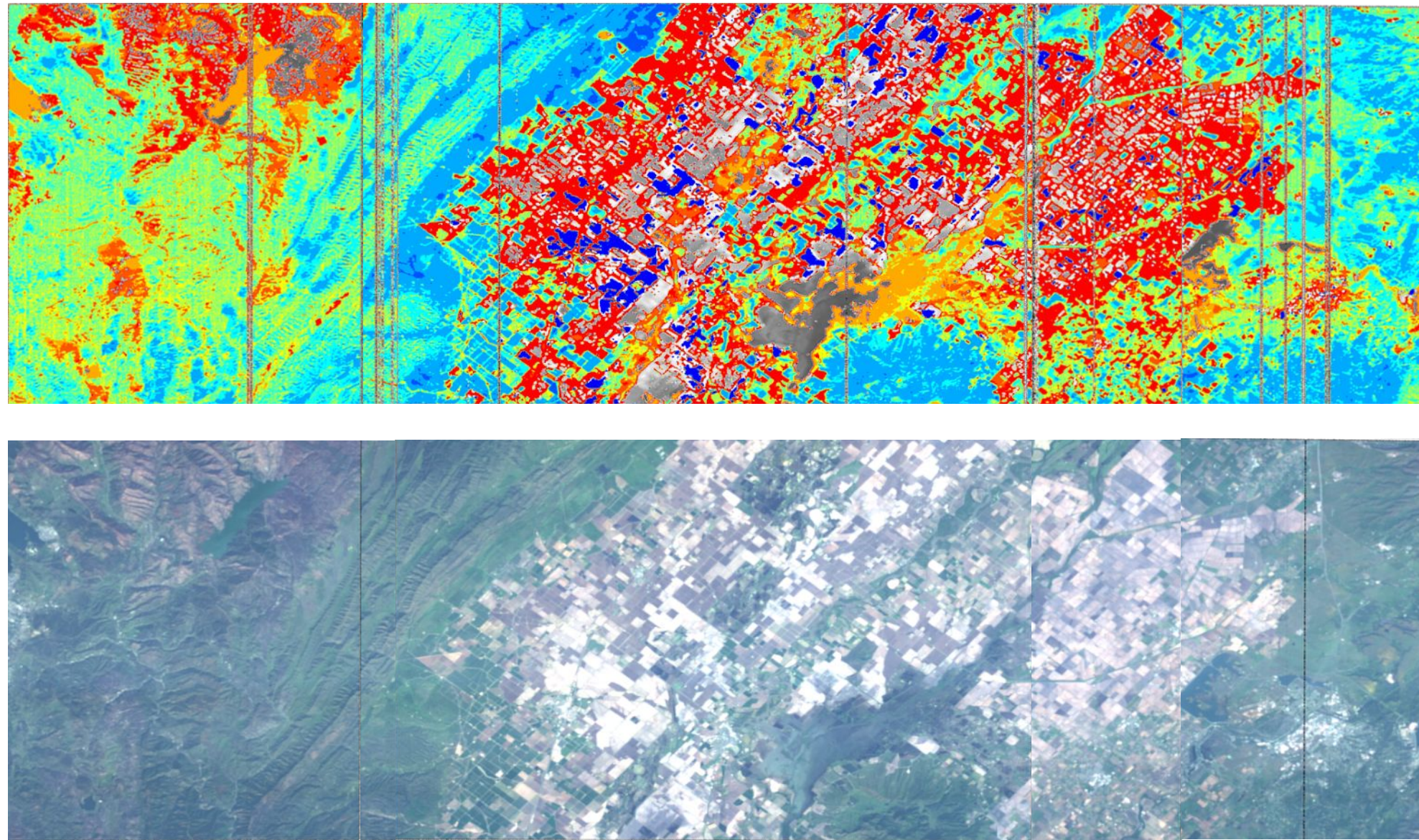
RGB Image



Methane Neural Net Results



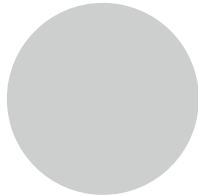




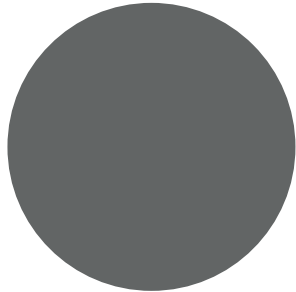
Uses three vegetation indices to calculate *Fire Risk*; includes live fuel moisture content

- a) broadband/narrowband greenness
- b) canopy water content
- c) dry or senescent carbon

Blue values indicate least fuel; **Red** values indicate most fuel.



\$2.1B
REGULATORY COMPLIANCE



\$12B, 8% CAGR
SAFETY & MONITORING



\$240B, 13% CAGR
GEOSPATIAL SOLUTIONS
FOR NEW ENERGY
EXPLORATION &
SUSTAINABILITY



OSK's proprietary analytics platform and satellite payload architecture enables unparalleled target monitoring services for both commercial and defense users on a global scale.

OSK's objective and scalable value proposition has attracted initial monitoring services contracts with over a dozen of the largest pipeline operators in North America.

Strong financial backing and myriad new market opportunities have OSK well positioned for rapid growth.

