

The background features a stylized map of a region, possibly in the United States, with a color gradient from dark blue on the left to bright orange on the right. The map shows various geographical features like rivers and land parcels.

OSIK

Orbital Sidekick

21 April 2023



DEPLOYMENTS
SEC-1
SEC-2

T+01:07:47
TRANSPORTER-7

SPEED
27666
KM/H

ALTITUDE
510
KM

STAGE 2 TELEMETRY

LIVE 405 viewers

New Space & Beyond

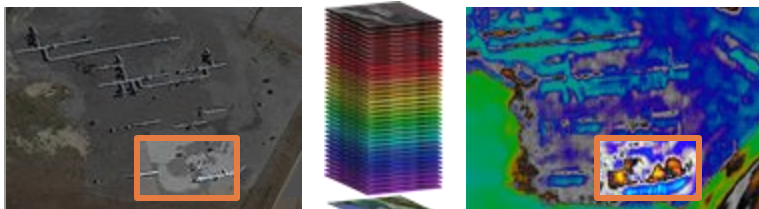
- Proliferated smallsat & exquisite systems
 - Diversification
 - Trade offs
 - Infrastructure

Global Persistent Monitoring with HSI Satellites

 GHOST Constellation



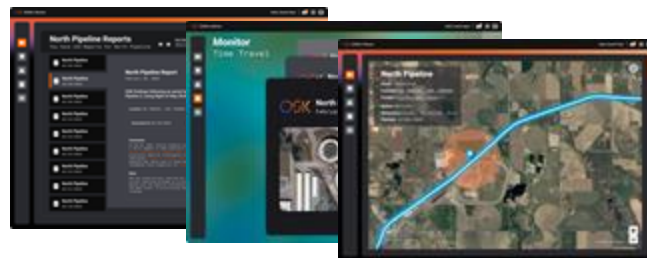
Spectral Intelligence



○ DATA ANALYTICS

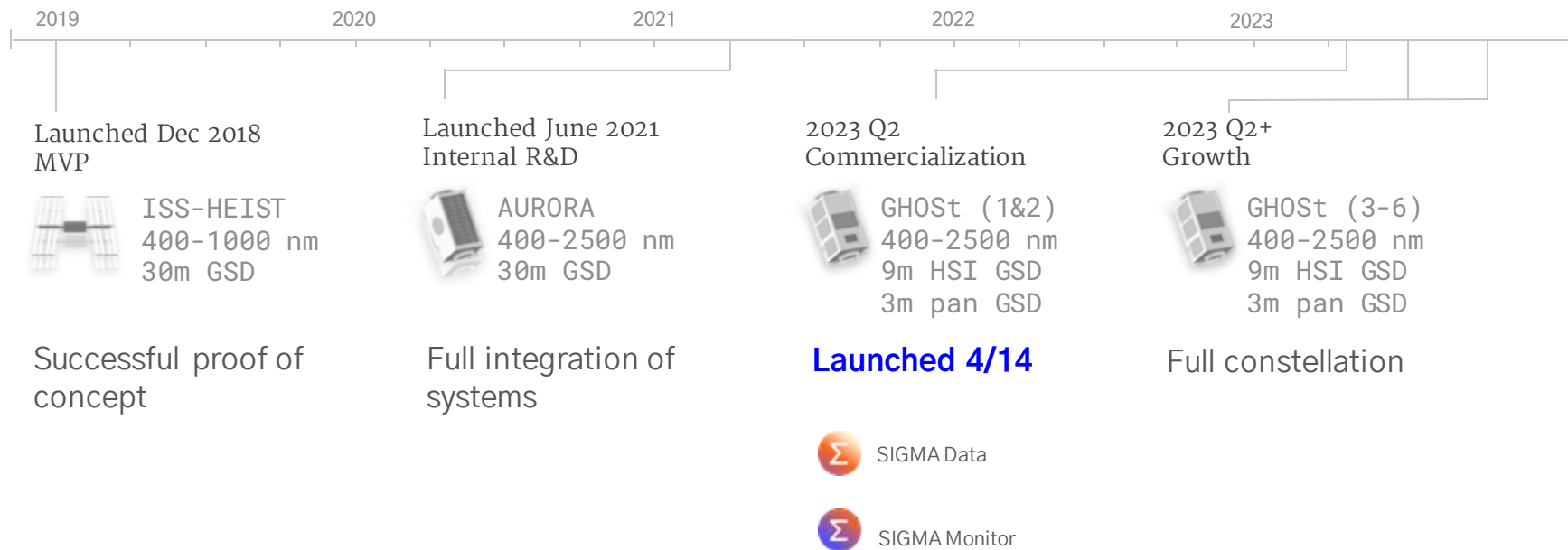


SIGMA™ User Platform

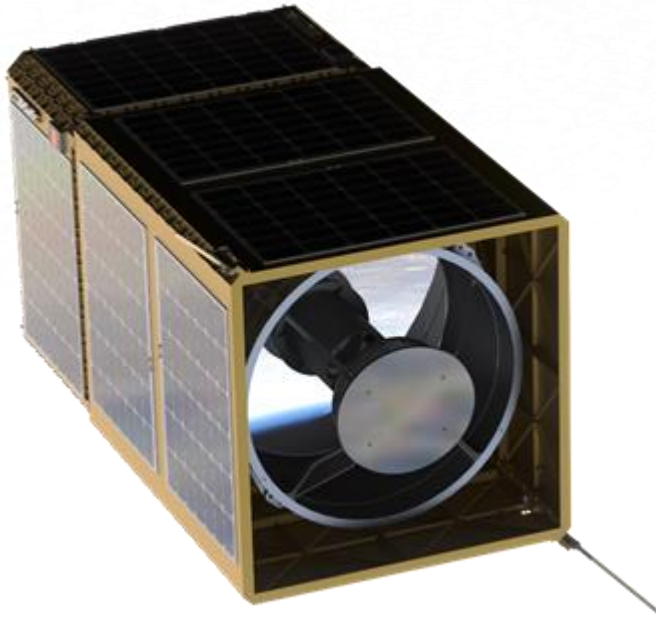


○ PRODUCT

OSK's Space Heritage



GHOSSt Product Specification



Orbit Characteristics	Detail
Orbit Altitude	500 km
Orbit Inclination	97.8° (SSO)
LTDN	10:00a
Target Revisit	1-2 days

Image Characteristics	Detail
Ground Sampling Distance	8.33 m
Swath Width	Min: 0.9 km Max: 4.3 km
Spectral Bands	472
Spectral Range	400 – 2500 nm
Spectral Resolution	9.3 nm FWHM
OSK Image Product	Level 1B
Radiometric Units	W/m ² /sr/μm

Additional Information	Detail
Data Format	ENVI, NITF
Raw Image, DN	16 bit
Positional Accuracy	30 m
Image Tile Size	25 km ²
Map Projection	WGS84, UTM

For more information, contact government@orbitalsidekick.com



GHOSSt Backscanning Demo



SIGMA Platform

Spectral Intelligence Global Monitoring Application



Data-as-a-Service

- Supplies geo-rectified HSI data based on AOI
- Targeted for **Government** customers
- Includes on-demand satellite tasking capabilities



Multi-Asset Monitoring

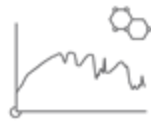
- Defense, Environmental, Health & Safety focused monitoring
- Serving **Government, Energy, Mining, Infrastructure** and **Ag** customers
- Includes the OSK Analytics signature detection catalog



Exploration and Analysis

- Global HSI Atlas with full analytics catalog and spectral library
- Powering the **Net Zero** transition
- Insight generation, advanced queries, custom results visualization

OSK's Carbon Atlas – An in depth analytics catalog updated frequently



GHG Emissions



Carbon Mass



Speciation



Flora Health



Soil Carbon



Soil type



Soil Health



Mineral Id.

& More

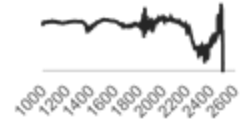
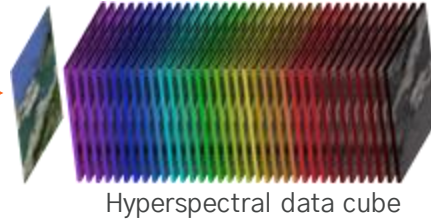
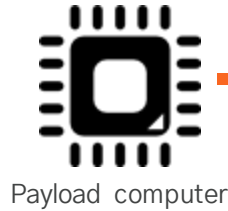
On-board Anomaly Detection and Alerts

Satellite tasking via commercial ground stations

All compute performed at edge including tasking, processing, classification algos, encryption

Radiometric calibration

High priority spectral signatures for target detection



Data cube downlinked via commercial ground station
Anomaly coordinates reported to user

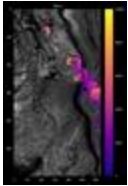


Rapid ID
8TB data processed within 3.5 hours with 8 cores



OSK Hyperspectral Applications

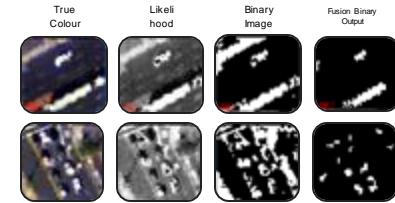
○ Methane Leak Detection



○ Mineral Exploration



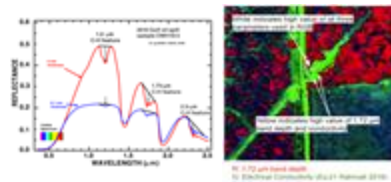
○ ROW Intrusions



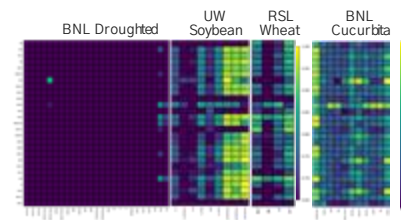
○ Erosion



○ Oil Spill Detection



○ Vegetation Speciation

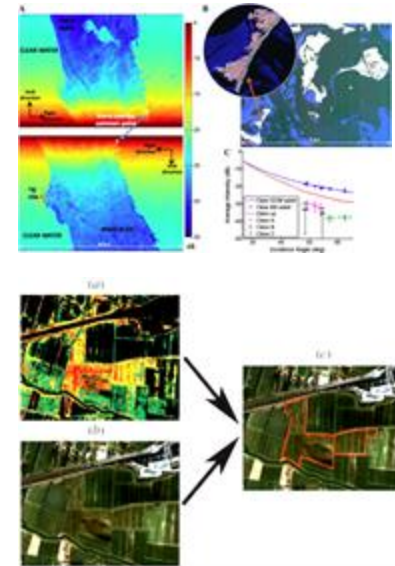
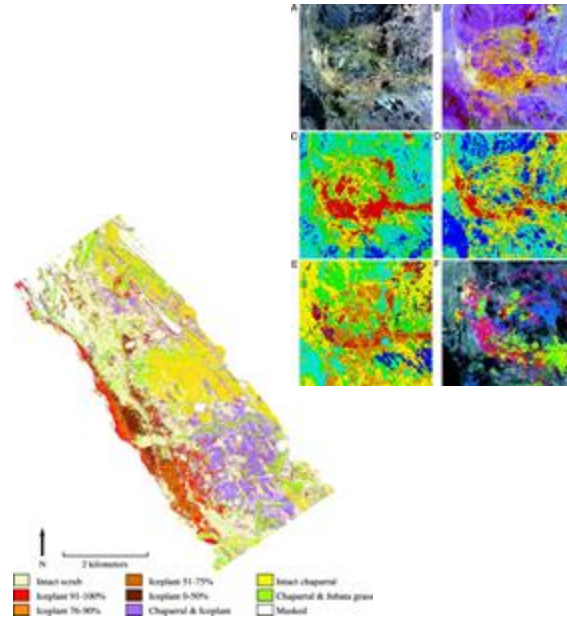
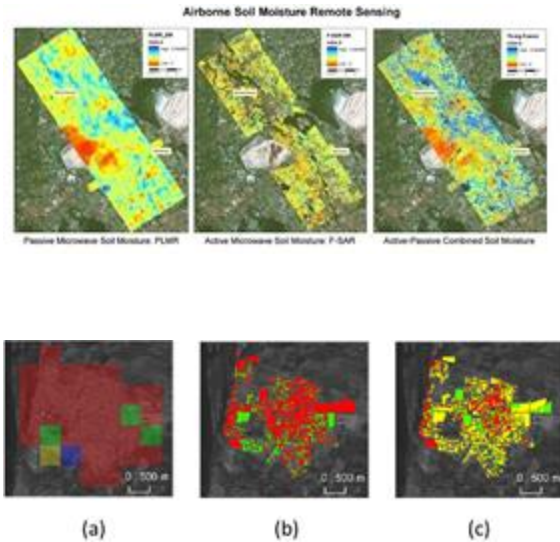


Hyperspectral Applications

- Agriculture Soil Mapping
- Disaster Recovery

- Vegetation Speciation
- Mineral Exploration

- Chemical Detection
- Hazardous Waste Monitoring



Agreements with Major Corporations & USG

Monitoring Services Using Satellites (& Aircraft)



USG - Defense, IC, Civil



Development Programs & Investment



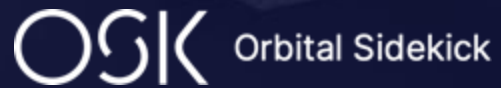
Pilots / LOIs



OSK Satellites

GHOSt-3 undergoing environmental testing for June launch





Contact

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