## SPACEKNOW

# Unlock the power of data from space



SPACE **KNOW** Guardian<sup>®</sup>

### State-of-the-art Al-based imagery intelligence software for an automated analysis of satellite imagery

Observe from space and get all the information firsthand. Guardian allows you to monitor and analyze areas of interest anywhere around the world – automatically and with ease! Access hundreds of satellites from the largest providers on the market. Just open your laptop and control the sky.



#### TIP & CUE

Surveil smart using low-cost/free imagery to monitor vast areas. Acquire high-resolution imagery once an unusual activity is detected.

#### **BE AT THE VANGUARD**

Superior capability in military equipment detection and classification, complex land segmentation, and change detection on a wide range of optical imagery.



All-weather, day and night object detection and change detection utilizing Synthetic Aperture Radar technology.

#### C ENHANCE CAPACITY, SAVE TIME

Automated monitoring and notification system based on predefined thresholds.

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Have Guardian with all existing features deployed directly to your hardware or private cloud.

## Situational Awareness & Early Warning

- Monitor unlimited military bases around the world
- Near-real time situational awareness over areas of interest
- Early warning for military build-up with automated alerts
- Optical and SAR solutions for day/night and all-weather monitoring





Saky Air Base 2022: EO high-res. before the strike, Planet SkySat

Luninets Air Base 2022: EO highres. military build-up before the invasion, Planet SkySat Saky Air Base 2022: EO high-res. after the strike, Planet SkySat



Yulin Aircraft Carrier Base 2022: EO high-res. permanent monitoring of hostile power projection assets, Planet SkySat





# Evacuation operations support

- Near-real time intelligence and planning support for emergency evacuation operations
- Identification of possible entry / exit points, key chokepoints, traffic density, highly congested areas and possibly dangerous areas
- Identification of possible hostile activities and threats





# Sanctions monitoring

- Permanent monitoring of military-industrial complex around the world for security or economic reasons
- Monitoring of effectiveness of sanctions against specific countries or specific companies
- Generate regular production charts and see how quickly the enemy can replace its military equipment

#### Newly produced Sukhois

Source: Planet Labs satellite imagery



Sukhoi Aircraft assembly plant 2023: EO high-res. aircraft detection and classification for sanctions and military-industrial complex monitoring, Planet SkySat



# Energy Intelligence

- Monitor unlimited oil & gas fields around the world
- Check regularly the construction and functioning of LNG terminals globally
- Optical and SAR solutions for day/night and all-weather monitoring
- True intelligence based on imagery evidence and analyses







Kovykta gas field 2016: EO lowres. development monitoring, ESA Sentinel 2



Arctic-2 LNG Terminal 2020: EO high-res. development monitoring and vessels detection, Planet SkySat



Kovykta gas field 2023: EO lowres. development monitoring and change detection, ESA Sentinel 2



Arctic-2 LNG Terminal 2023: E0 high-res. development monitoring and vessels detection, Planet SkySat





# Border Crossing Monitoring

- Detection of cars and trucks
- Early warning for possible crisis mounting on the border
- Optical and SAR solutions for day/night and all-weather monitoring
- True intelligence based on imagery evidence and analyses



Georgia-Russian border crossing 5/2021: EO high-res. detection of cars and trucks, Planet SkySat

Georgia-Russian border crossing 9/2022: EO high-res. detection of cars and trucks - traffic jam and crisis escalation as Russians are leaving the country to escape from the mobilisation, Planet SkySat





# Migration Monitoring

- Monitor unlimited refugee campsites around the world
- Early Warning check the situation in near-real time far beyond your borders where the crises are mounting
- Deploy countermeasures in advance when the situation gets critical
- True intelligence based on imagery evidence and analyses







Moria refugee campsite 9/2020: EO med-res. before the migration surge, PlanetScope



Middle East refugee campsite 2019: EO high-res.with detection of single tents, Planet SkySat



Moria refugee camp 10/2020: EO med-res. surge of migrants and extension of the campsite, PlanetScope



Moria refugee camp 10/2020: EO med-res. surge of migrants and extension of the campsite highlighted by change detection algorithm, PlanetScope

# Dark Ships Detection

- IMINT and SIGINT combination for detection of possible clandestine maritime activity or unidentified ships
- Ingestion of maritime AIS and RF data with imagery confirmation
- Optical and SAR solutions for day/night and all-weather monitoring
- True intelligence based on TECHINT evidence and analyses



SAR: Metallic reflection, ESA Sentinel 1



AIS visualisation with optical confirmation of vessel, PlanetScope

# SAR satellite imagery and analytics

- Automated detection of vessels and aircraft
- Monitor unlimited bases around the world
- Near-real time situational awareness over areas of interest
- Early warning for military build-up with automated alerts
- Day/night and all-weather solution
- Uncovers intelligence in the long Arctic darkness



Yuchi Naval Base, China. 12/2023, Capella Space SAR high-res

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#### Trusted by NATO militaries and intelligence agencies around the globe

#### ABOUT US

At SpaceKnow, we are at the forefront of automated satellite data analysis in precision-recall capability, multiple data source integration, and scalability. We are global leaders in the quality of AI-based algorithms thanks to an entirely in-house development process, including pixel-wise annotations, multiple machine-learning processes, and thorough testing.

SpaceKnow has ten years of history of cutting-edge satellite data expertise which we offer to our clients through our unique and easy-to-use SpaceKnow Guardian imagery intelligence analytical software product.

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#### Fully automated monitoring

Rapid deployment, highly scalable



with direct satellite tasking

only basic training necessary

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