Respond to Disaster with on-demand Satellite Imagery
Emerging technologies for disaster management

Our world has changed: BlackSky is the new way to see our world

Mobile / GPS
Web Mapping
Location-based Intelligence

Satellite Imagery
Geospatial SW
Desk Top Mapping

Real-time Global Monitoring
Real-time Intelligence

Dynamic Monitoring from Space
Actionable Intelligence On-Demand

2000
2010
2022
2025+

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Dynamic hourly disaster site monitoring

BlackSky can reliably see and understand the Disaster affected sites what others can’t

16 Satellites  On orbit

2,000+ images  Daily Delivery Rate

30 – 90 minutes  Delivery Timeline

15x daily/hourly  Revisit Rate

99.9%  Uptime & Availability

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Images and analytics in under 90 minutes

Powered by BlackSky’s Spectra platform

Dynamic monitoring of the most important strategic and economic assets in the world

Taskable LEO Constellation Provides Hourly Monitoring

Spectra AI

On demand access from any device or platform

Scalable AI-enabled Cloud Platform

Real-Time Tasking

Real-Time AI Processing

Real-Time Delivery

3rd Party Data and IoT Feeds

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A smarter approach to space.

High-frequency monitoring of the most important strategic locations, economic assets, and events in the world.

Actionable intelligence from capture to delivery in under 90 minutes, up to 15 times a day.

Easy access platform for all users, optimized for agility; no geospatial data expertise required.

STATIC MAPPING
Traditional large polar-orbiting satellites collect static images over the entire globe.

BLACKSKY REAL-TIME MONITORING
BlackSky’s constellation monitors the most important strategic and economic assets in the world.
See, understand and act on events, in real-time.

High-frequency:
Hourly revisit of the most important locations and assets in the world

On demand:
Tasking to delivery in under 90 mins to networked & remote secure tactical terminals

Uncontested access:
For your defined areas of interest

AI-enabled:
Actionable intelligence delivered on demand via secure web domain
Why Rapid Response Matters?

- Increase speed to delivery
- Get imagery where others don’t
- Monitor areas for recovery
BlackSky’s Product Offering

**OFFERING**

**DESCRIPTION**

**SERVICES**

- Imagery on Demand
- Detect on Demand (Rapid prototyping/roll-out)
- Tip & Cue
- 1m imagery
- Object Vector Layers
- Moving Target Indicators (to measure activity at ports, airports and construction sites)
- DSM/DEM
- Event Monitoring
- Site Monitoring
- Broad Area Search
- Change Detection
- Economic Indicators
- Construction Reports
- Regional Activity Reports (Air/Sea/etc)
- Broad Area Change Layers

**PRODUCTS**

- Imagery on Demand
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**Dynamic Tasking**

Access to a distributed, global sensor network optionally coupled with automated analytics

- Imagery on Demand
- Detect on Demand (Rapid prototyping/roll-out)
- Tip & Cue
- 1m imagery
- Object Vector Layers
- Moving Target Indicators (to measure activity at ports, airports and construction sites)
- DSM/DEM

**Dynamic Monitoring**

Maintain awareness of global activity in real-time and receive alerts when critical changes occur

- Imagery on Demand
- Detect on Demand (Rapid prototyping/roll-out)
- Tip & Cue
- 1m imagery
- Object Vector Layers
- Moving Target Indicators (to measure activity at ports, airports and construction sites)
- DSM/DEM

**Dynamic Data Services**

Access BlackSky’s deep archive of imagery, insights, and historical events

- Imagery on Demand
- Detect on Demand (Rapid prototyping/roll-out)
- Tip & Cue
- 1m imagery
- Object Vector Layers
- Moving Target Indicators (to measure activity at ports, airports and construction sites)
- DSM/DEM

**SERVICES**

- Archive Access
- Active Archive
- AI Accelerator
- Historical Imagery
- Annotated Imagery Bundles
- AI Accelerator (Beta)

**PRODUCTS**

- Imagery on Demand
- Detect on Demand (Rapid prototyping/roll-out)
- Tip & Cue
- 1m imagery
- Object Vector Layers
- Moving Target Indicators (to measure activity at ports, airports and construction sites)
- DSM/DEM

**APIs**
Dynamic Data Services: Leverage historical data for key locations

Build better AI models, gain context on key sites

Historical Archive
Dive into BlackSky’s deep historical archive of multi-INT data.

Live Archive
Get imagery for thematic locations around the world soon after collection.

AI Accelerator
Build competitive AI models using training data from the world’s fastest constellation.
BlackSky On-demand: Products

Single-frame imagery
- Daytime
- Nighttime

Multi-frame imagery
- Area 2x1
- Burst
  - 2-frame stereo
  - 5-frame stereo

Analytics
- Detect

Single-frame short-wave infrared (coming soon)
USE CASES: Respond to Crisis in real-time
Himachal Pradesh Flash Flood

Order Placed At 17-07-2023 08:30 AM (IST)

Acquired On 17-07-2023 10:00 AM (IST)

Delivered in 1:30 Hour From Time Of Order Placement
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Darnah, Libya Flash Flood

Order Placed: 13-09-2023 07:20 AM (IST)

Imagery Acquisition: 13-09-2023 08:52 AM (IST)

Delivered in 1:32 hours from time of order placement

Total Acquisition: 4

Lat / Long: 32.75993055555556, 22.64138861111118
Sikkim Cloudburst

Imagery Order Placed: 05-10-2023  12:30 PM (IST)
Imagery Acquisition: 05-10-2023  02:15 PM (IST)

Delivered within 1.45 hours from the time of order placement

Lat / Long: 27.924426901820944, 88.21474739997905
Pre-Cloudburst (03-07-2022). Lake completely filled with Water

Post-Cloudburst (05-10-2023). Lake damaged after cloudburst/Flash flood
Flood: Fitzroy Crossing

BSG-118-20230112-013825-59291397 - Purchased

Date: 01/12/2023
Time: 01:38:25 UTC
Area: 26.7km²
Cloud cover: 0%
Georeferenced: Yes
Orthorectified: Yes
Sun elevation: 59.9°
Sun azimuth: 102.1°
Satellite elevation: 74.7°
Satellite azimuth: 241.4°
Off-nadir angle: 13.7°
Resolution: 1.0m
Sensor: Global-18
Product type: Daytime

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Flood : New South Wales
Flood: New South Wales
Forest / Bush fire : NSW

Out-of-control forest fire, NSW
BlackSky
8 March 2023

Out-of-control grass fire, NSW
BlackSky
19 March 2023

Order placed at 2023-03-19 01:26, Sun 19 Mar 12:26 (AEST)
Acquired on 2023-03-19 03:05:12 UTC, Sun, 19 Mar 14:05 (AEST)

Delivered in 1:41 hour from time of order placement.
Forest / Bush fire : NSW (Night-time Vision)

Light emissions from town in New Zealand
BlackSky
12 Dec 2022

Out-of-control grass fire monitored during the night, NSW
BlackSky
17 March 2023
Wildfire smoke shrouds much of this area over the Biobío Region of Chile. Nighttime Imagery (NTI) a few hours later that day shows which fires are still actively burning beneath the haze.
Hurricane: Sanibel causeway, Florida
### Hurricane: Sanibel Causeway, Florida

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**Sept. 20, 3 p.m. Eastern Time**

Sanibel causeway damage due to Hurricane Ian, Florida.

**Sept. 29, 5 p.m. Eastern Time**

Satellite damage assessment imagery for Hurricane Ian aftermath.

**Sept. 30, 8 a.m. Eastern Time**

Aerial overview for the damage caused by Hurricane Ian.
**Hurricane: Sanibel causeway, Florida**

Sept. 28, 3 p.m. Eastern Time
Hurricane Ian makes landfall near Cayo Costa, Florida

Sept. 29, 4 p.m. Eastern Time
A BlackSky satellite captures imagery of damage from Hurricane Ian

Sept. 29, 5 p.m. Eastern Time
BlackSky delivers satellite imagery for disaster response teams

Sept. 30, 8 a.m. Eastern Time
Aerial sources deliver imagery of the storm’s aftermath
Earthquake: Turkey
Earthquake: Turkey
Relief sites emerged around ancient Antakya where entire neighborhoods were leveled by the recent Kahramanmaras temblors.
Mining Disaster, Ecological Spill: Jagersfontein tailing dam (Before disaster)
Mining Disaster, Ecological Spill: Jagersfontein tailing dam (After disaster)
Heavy rain triggered multiple landslides in the village of Secocha, Peru on February 5, 2023. Massive mudflows swept through the village, destroying hundreds of homes, and resulted in dozens of fatalities.
A train carrying hazardous materials burst into flames in the small village of East Palestine, Ohio, after derailing at 9pm Friday, February 3.

Those residing within one mile of the incident were asked to evacuate or shelter-in-place as fire crews from the tri-state area worked to contain the blaze.
Water recedes

Drought

Water levels receded as high as 51.5 feet during drought conditions.

Record snow/rainfall brought the boat dock over water and lakeside campsites back to the shoreline.
Persistent monitoring of critical assets around the globe
Persistent monitoring of critical assets around the globe
Construction Monitoring: Jewar Airport
Use Case: Remote communities – monitor recovery progress or illegal dwellings

1 August 2022

25 April 2023
THANK YOU

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