

May 2025

Geospatial Sidekick

AI-powered insights from geospatial data

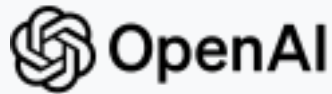
Steve Brumby PhD, CEO/Co-Founder

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Founded in 2020 by AI and space experts from US National Laboratories and National Geographic Society, Impact Observatory agentic systems unite language and vision AI to unlock insights from geospatial data at unprecedented speed and scale.





Oct 2020

Jan 2022

Jan 2024

Present

First public global land cover from Sentinel-2 imagery

On-demand land cover and change monitoring

Geospatial Sidekick agentic AI system

UN Biodiversity Lab platform with UNEP and UNDP

Global land cover and change detection for NGA

On-demand analytics from commercial imagery

Reduce Complexity, Unlock Markets

AI language and vision models unite to unlock geospatial insights for new data users



Geospatial Analysts use Sidekick as a **Data Assistant** to accelerate discovery, retrieval, tasking, and processing of relevant data.



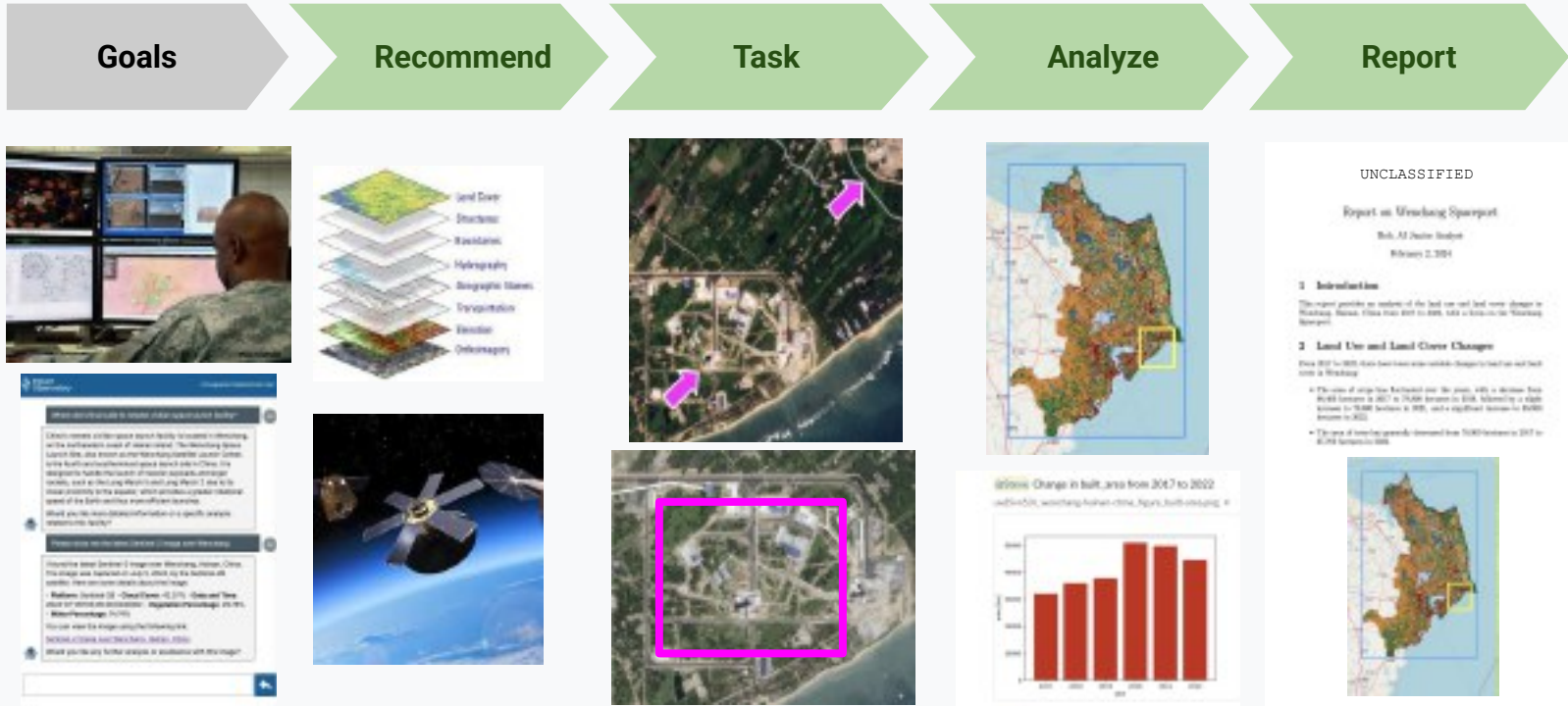
Subject Matter Experts use Sidekick as an **Analysis Assistant** to recommend observations, orchestrate and carry out repetitive analysis, and triage and filter change for expert assessment.

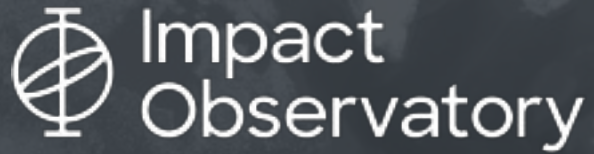


Operations Managers use Sidekick as an **Insights Assistant** to carry out routine derivation of insights, recommend common actions, and accelerate reporting of outcomes for non-geospatial users.

Sidekick for search and refine workflows

Language interface to search geospatial data and orchestrate analysis and tasking





Geospatial Sidekick

Search & Refine Demo

Geospatial Sidekick: Current capabilities

Answer Geospatial Questions

Assist with geospatial analysis, Earth observation satellites, GIS systems, investigating changes in areas, technical documentation, and Earth and space science concepts.

Investigate Changes in AOI

Combine change detection, land cover analytics, and reporting of historical events, and track spatial statistics to better understand causes in change and predict outcomes.

Search, Access, and Task Imagery

Request and interact with satellite imagery and geospatial data across modalities from multiple vendors, including Microsoft Planetary Computer, Planet Labs, and more.

Search Documentation and News

Leverage documentation in knowledge bases and news searches to build a comprehensive understanding of AOIs and supported use cases.

Study Areas of Interest

Systematically monitor and analyze your areas of interest, providing historical context, recent trends, and near real time status to support analysis and decision making.

Provide Data Analysis and Insights

Derive actionable insights from geospatial data, supporting informed decisions and strategic actions in various applications.

Impact Observatory RESET CHAT PROJECTS 1

4. order_d1bf3b9e15 玉林海軍基地

- プロジェクト: Steve
- スラグ: orderd1bf3b9e15-yulin-naval-base

5. order_fbd5738a34 yulin-01

- プロジェクト: IO
- スラグ: order_fbd5738a34-yulin-01

これらのレイヤーのいずれかを表示する必要がある場合や、さらに支援が必要な場合は、お知らせください!

pls show order_d1bf3b9e15 Yulin Naval Base for aoi Yulin Naval Base

You can view the layer "order_d1bf3b9e15 Yulin Naval Base" for the AOI "Yulin Naval Base, Hainan" using the following link:
[View Layer on Map](#)


If you have any more questions or need further assistance, feel free to ask!

Japanese:

「order_d1bf3b9e15 玉林海軍基地」のレイヤーを「玉林海軍基地、海南」のAOIで表示するには、以下のリンクを使用してください:

[マップでレイヤーを表示](#)

他に質問や追加のサポートが必要な場合は、お気軽にお知らせください!



Yulin Naval Base 246319-250315
 isod-10m-eo_a_d1bf3b9e15

NO CHANGE

■ ANOMALOUS CHANGE

■ NO DATA

IO Sidekick

Dynamic Data Access & Integration

The platform enables automated access and integration of large data streams up to global scale, combining proprietary datasets with foundational geospatial data for comprehensive analysis.

AI-Powered Monitoring & Cross-Domain Insights

Leverage computer vision AI and remote sensing science to automate geospatial analysis, providing real-time intelligence from satellite imagery datasets, expert geospatial knowledge, and streaming data feeds.



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ALOS PALSAR 25m ANNUAL COMPOSITE - 2021

IO Sidekick

Extensible via APIs

Integrate Earth Observation datasets via public and commercial APIs, including integrate SAR and HSI imagery, with a path to ingesting national datasets.

Flexible Deployment Options

Deploy in the cloud hosted within national boundaries, and available for on-premise deployment. Meets the highest security and data governance standards, ensuring adaptability to organizational needs.

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Market and Business Model

Defense and Intelligence Market

We sell to customers in NATO and allied countries, so they can address risks and opportunities in ...

Strategic Intelligence requires continually updated search for activities of concern, including automated monitoring of status and trends at known and suspected facilities over large geographical distance. AI helps the human workforce take advantage of the full range of capabilities and keep up with the flood of data from many sources.

Intelligence Preparation of the Battlespace requires up to date analysis across an area of operations, bringing together all available geospatial data from ground to space, and able to recall relevant details from previous reporting, curated news sources, and other noisy open sources.

Damage Assessment requires rapid analysis across modalities in historical context to provide analysts and targeters with accurate, timely reporting on battle damage, collateral damage, strike effectiveness, and priorities for retargeting.

Disaster Response still lack accurate and timely data to respond to the growing number and severity of environmental disasters and human conflicts

Civil Market

We sell to customers in ...

Governments from local to national level will use our solutions to account for and manage natural capital, understand environmental and long term climate risks to populations, and plan for sustainable development

Industries will use our solutions to plan for a sustainable and resilient future by understanding environmental and long term climate risks to their physical assets, to their supply chains, and to the markets they sell to

Finance and Insurance will use our solutions to assess sustainability and resiliency of investments by understanding environmental and long term climate risks to physical assets, to natural capital and raw resources, and to global markets, delivering a “green dividend” to forward leaning investors and market actors

... so they can address risks and opportunities in ...

Urban Development currently lacks accurate, timely data on land use within developing cities for a rapidly growing global urban population, and data to plan sustainable, resilient expansion

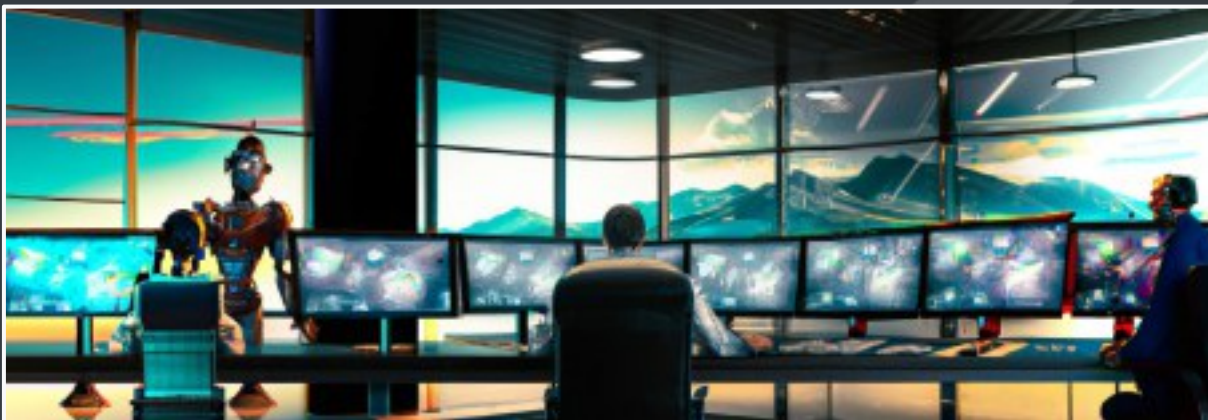
Agriculture currently lacks accurate, timely data on the global distribution, health, and sustainability of major traded crops and on the subsistence crops needed to support a growing global population

Natural Resources from freshwater to forests, grasslands, and mineral deposits need accurate, timely accounting that recognizing their value to populations and the ecosystems vital to long term sustainability and resiliency

Disaster Response still lack accurate and timely data to respond to the growing number and severity of environmental disasters

Business Model

Faster, Better, Cheaper, and EASIER



LLMs + computer vision enable geospatial AI assistants with specialist analytical skills ...

- an **entourage of assistants** for geospatial experts in governments and industry to prepare data for human analysis, automate repetitive tasks, and assist with reporting
- a **concierge service** for non-geospatial experts to access the world of geospatial data, turning pixels into answers and able to explain results, reasoning, and recommendations in plain language

Leadership Team



Steve Brumby PhD
Co-Founder CEO/CTO
Serial Entrepreneur

Descartes Labs Co-Founder
National Geographic
Los Alamos National Lab



Sam Hyde
Co-Founder, Operations

National Geographic
White House OSTP/USGCRP
Madison River Group



Amy Larson PhD
Science

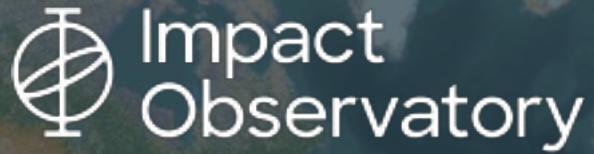
IAEA / US State Department
Los Alamos National Lab



Nathan Longbotham PhD
Product

EOI Space
Floodbase
Descartes Labs
Digital Globe

CEO Dr Steve Brumby is a world expert in AI for Earth observation and a serial space entrepreneur. Impact Observatory's team combines deep technical expertise with space observation systems, informed by decades of experience creating world-leading AI+space systems for US Government, industry, finance, and governments.



Thank you

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