AWS Aerospace and Satellite Solutions

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The world is entering an exciting and daring new space age

The space industry is rapidly growing and transforming

A new era of human spaceflight is dawning

Satellites launched into orbit will quintuple over the next decade

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The cloud is enabling space industry success

Driving down the cost of innovation

Only pay for what you use

Managing and transforming data on earth and in space

Low-latency access to global cloud infrastructure

Helping to manage and protect valuable space assets

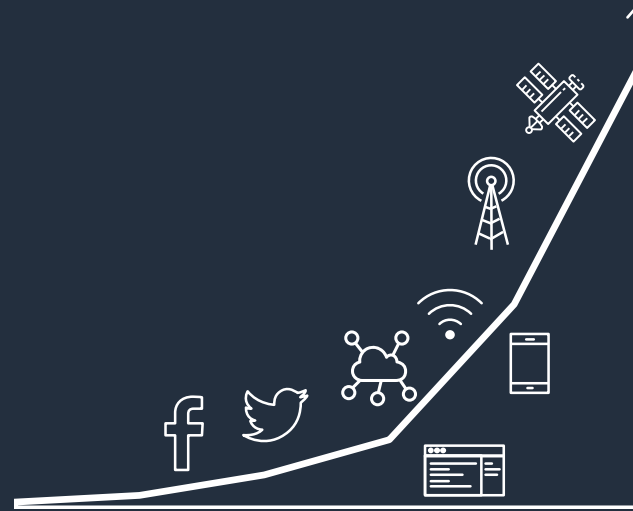Apply edge computing, artificial intelligence (AI), machine learning (ML) and Internet of Things

Providing modernized infrastructure and process
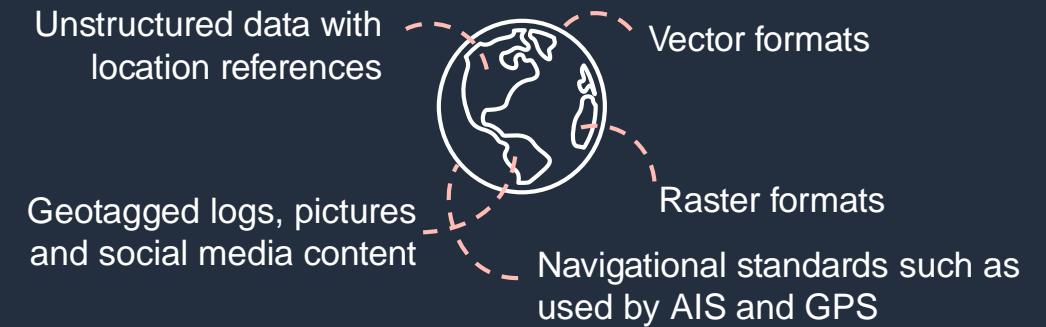
Focus on mission

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The new realities of geospatial data

Demand for faster decision-making

Explosion of data

Unstructured data with location references

Vector formats

Geotagged logs, pictures and social media content

Raster formats

Navigational standards such as used by AIS and GPS

Explosion of geospatial data standards

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Geospatial on AWS Today

Earth on AWS
Build planetary-scale applications in the cloud with open geospatial data.

Geospatial ML with Amazon SageMaker (Preview)

Up to 10 GB of free storage for 30 days with the **AWS Free Tier**

Build, train, and deploy ML models faster using geospatial data

Get started with Amazon SageMaker geospatial capabilities

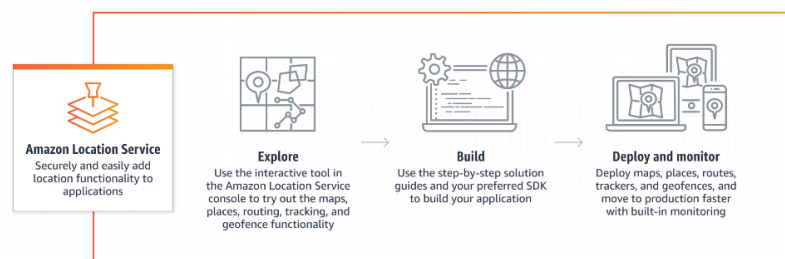Access readily available geospatial data sources, including satellite imagery, maps, and location data.

Efficiently process or enrich large-scale geospatial datasets with purpose-built operations such as resampling, mosaicking, and reverse geocoding.

Accelerate model building by using built-in, pretrained deep neural network models such as land cover segmentation and cloud masking.

Analyze geospatial data and explore model predictions on an interactive map using 3D accelerated graphics with built-in visualization tools.

How it works

Amazon Location Service makes it easy for developers to add location functionality, such as maps, points of interest, geocoding, routing, tracking, and geofencing, to their applications without sacrificing data security and user privacy.

Amazon Location Service
Securely and easily add location functionality to applications

Explore
Use the interactive tool in the Amazon Location Service console to try out the maps, places, routing, tracking, and geofence functionality

Build
Use the step-by-step solution guides and your preferred SDK to build your application

Deploy and monitor
Deploy maps, places, routes, trackers, and geofences, and move to production faster with built-in monitoring

Swisstopo Case Study

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

"Our Federal Spatial Data Infrastructure platform serves one million users per month. Running it on AWS has significantly shortened the time needed to allocate new servers, which helps us better serve our customers.

Hanspeter Christ
Deputy Head of Geoinformatics"
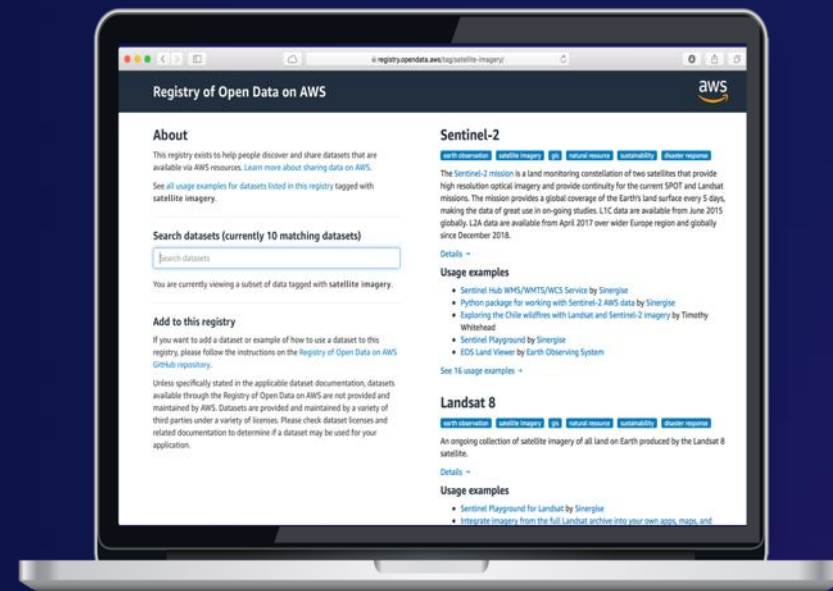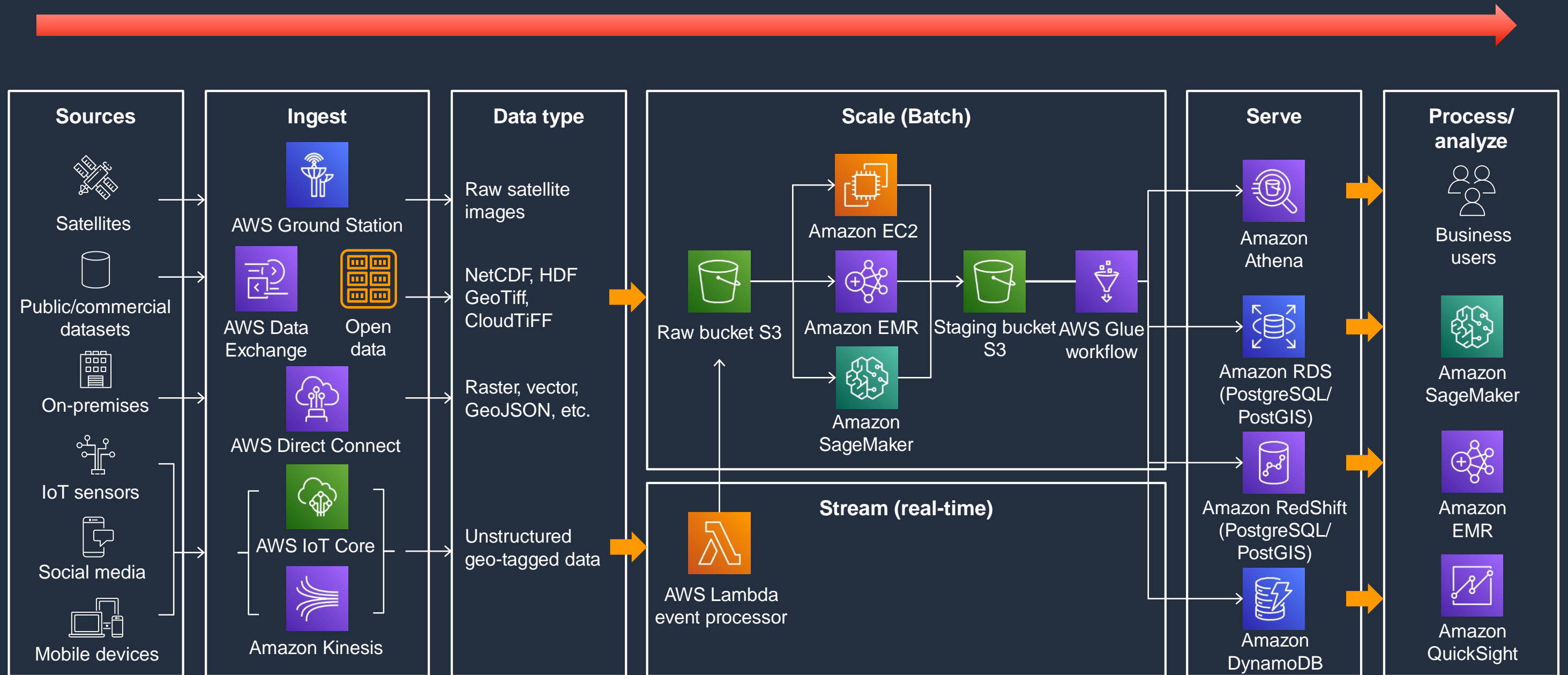
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Data lifecycle continuum

SageMaker Now Supports Geospatial ML

Build, train, and deploy ML models using geospatial data

Powered with

planet.

Access readily available geospatial data sources

Efficiently process or enrich large-scale geospatial datasets

Accelerate model building with pretrained ML models

Analyze and explore predictions with visualization tools

aws

Access geospatial data

1. Access Open Data on AWS, such as Landsat 8, Sentinel-2

2. Bring your own satellite imagery from providers such as Planet

3. Make your dataset accessible to everyone in your organization
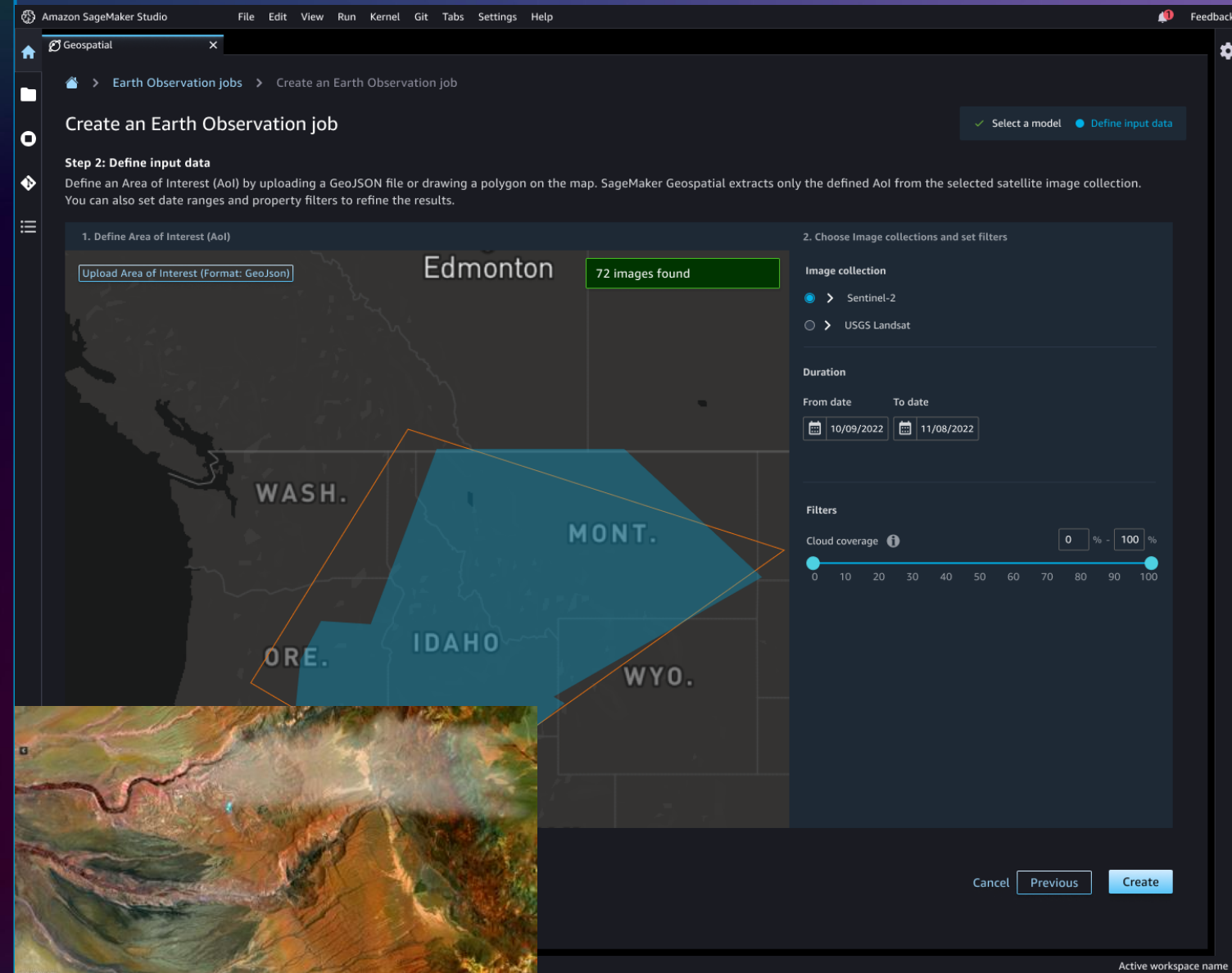
Use satellite imagery to track climate change

Track changes on the earth's surface and monitor climate impact.

1. Define a region of interest to monitor

2. Use change detection to understand long-term, large-scale changes between past and present imagery

3. Use geospatial ML to inform sustainability plans and policies

planet
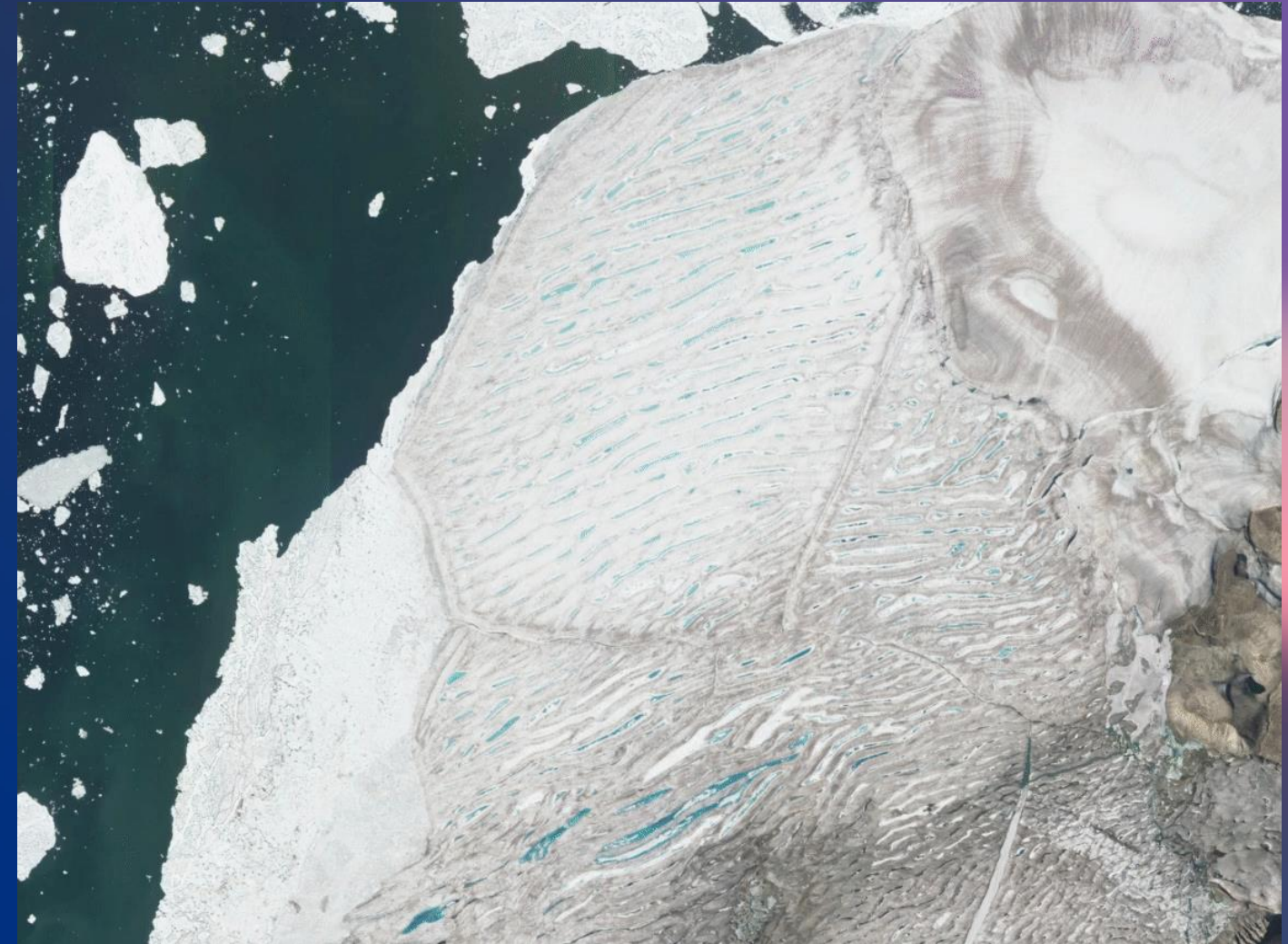
Enabling insights for better decision-making

Digital Earth Africa uses AWS to make continental-scale high-resolution satellite data available within minutes of capture, 800% faster than before, thereby enables prompt government environmental policy changes.

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