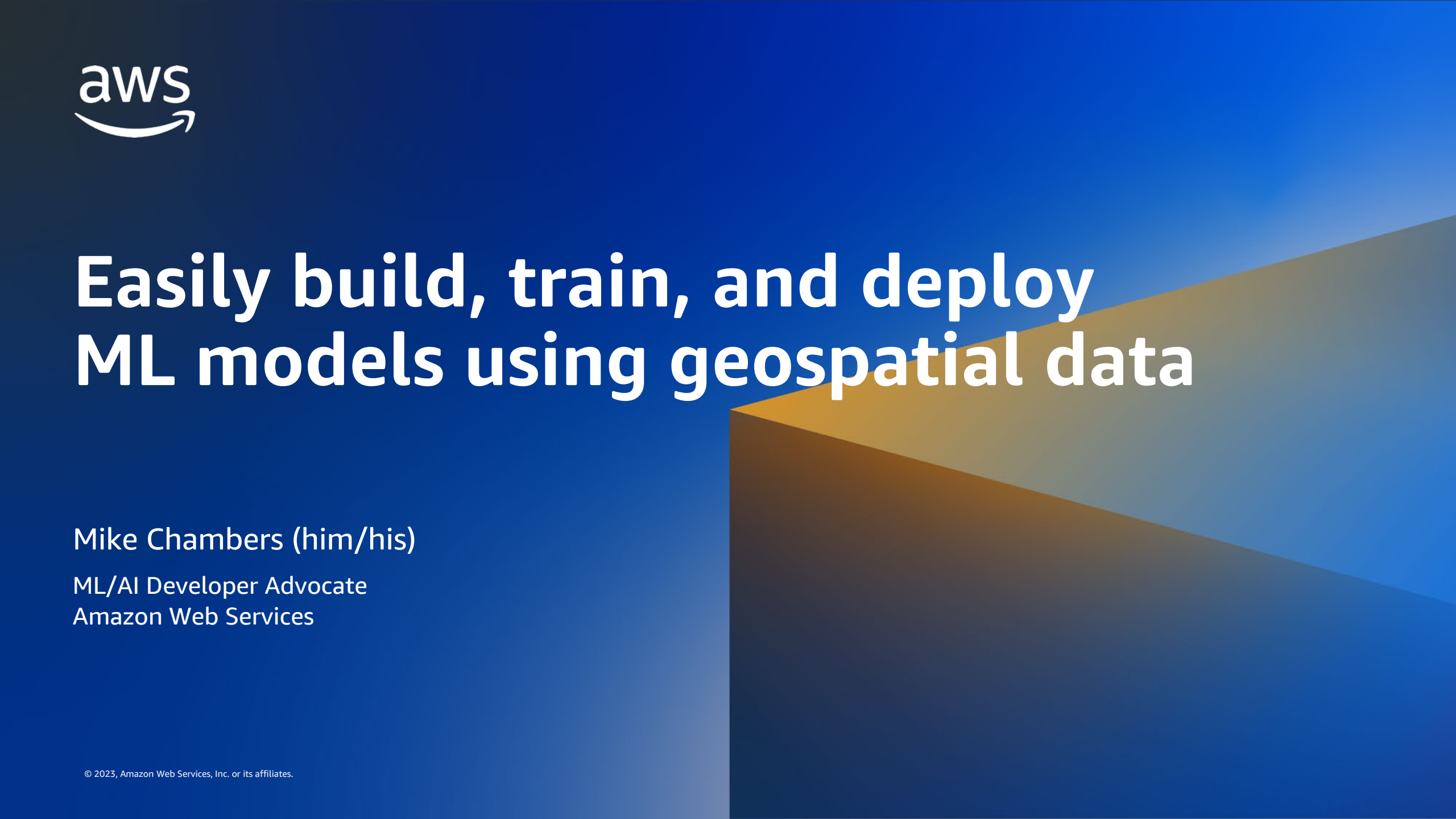


Easily build, train, and deploy ML models using geospatial data

Mike Chambers (him/his)

ML/AI Developer Advocate
Amazon Web Services

Location data.

Images

Customers

Maps

Waypoints

Location data.

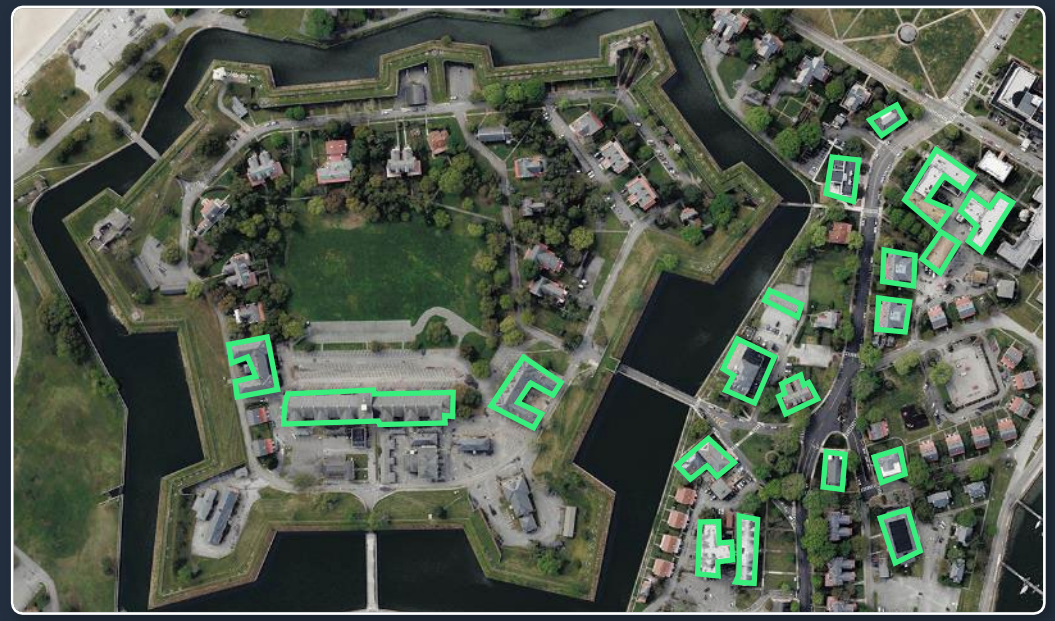
Routes

GPS

Address

What is Geospatial Data?

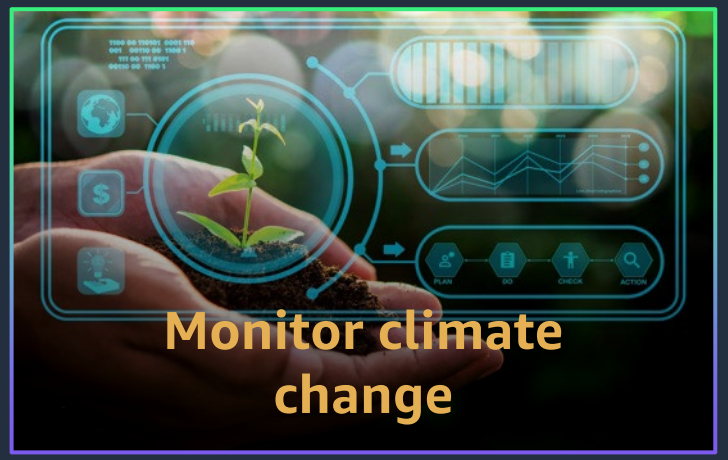
Aerial and satellite imagery (Raster)



Mapping data (Vector)

Road mask
(color as speed)

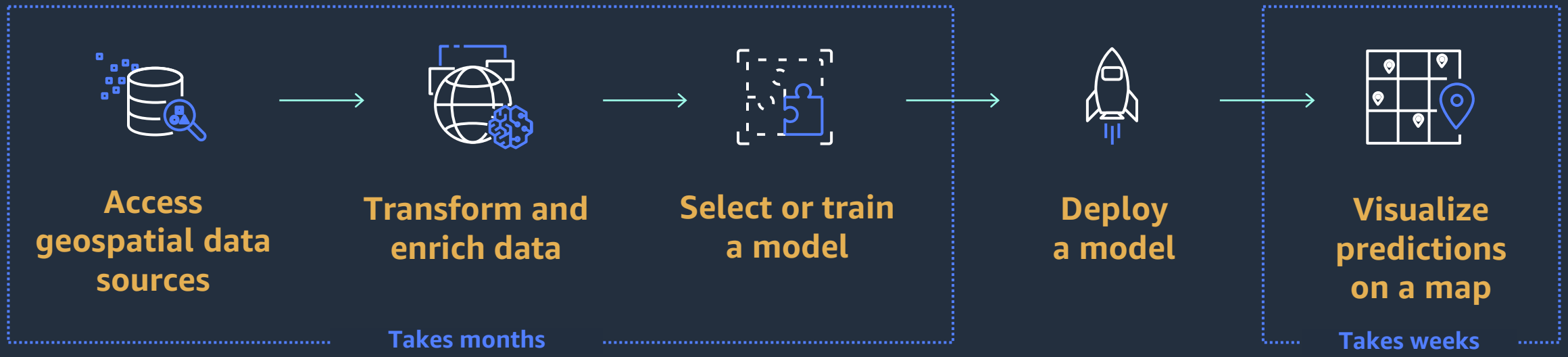
Unlocking New Geospatial ML Use Cases



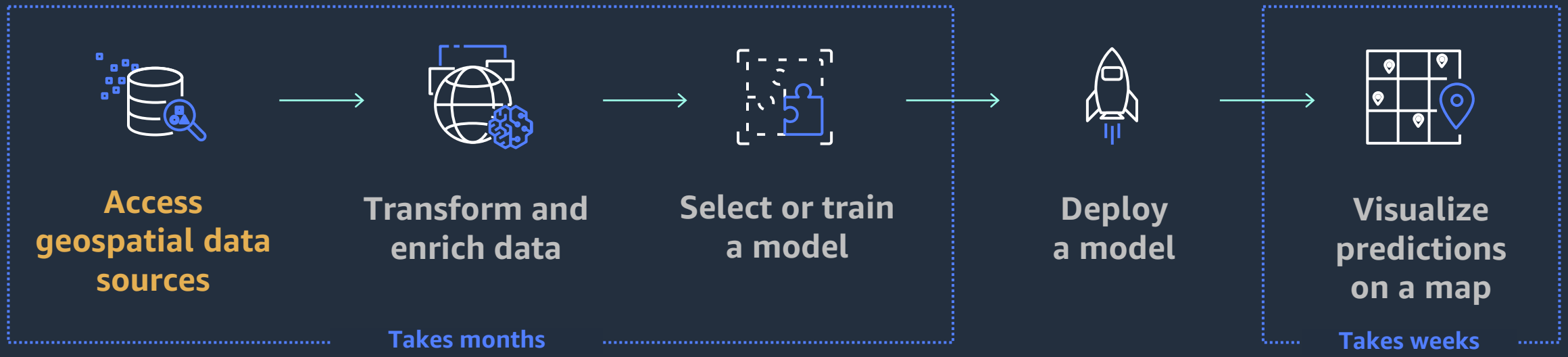
The **majority of the data** we collect daily contains geospatial information

But only a **small fraction** is used in ML today

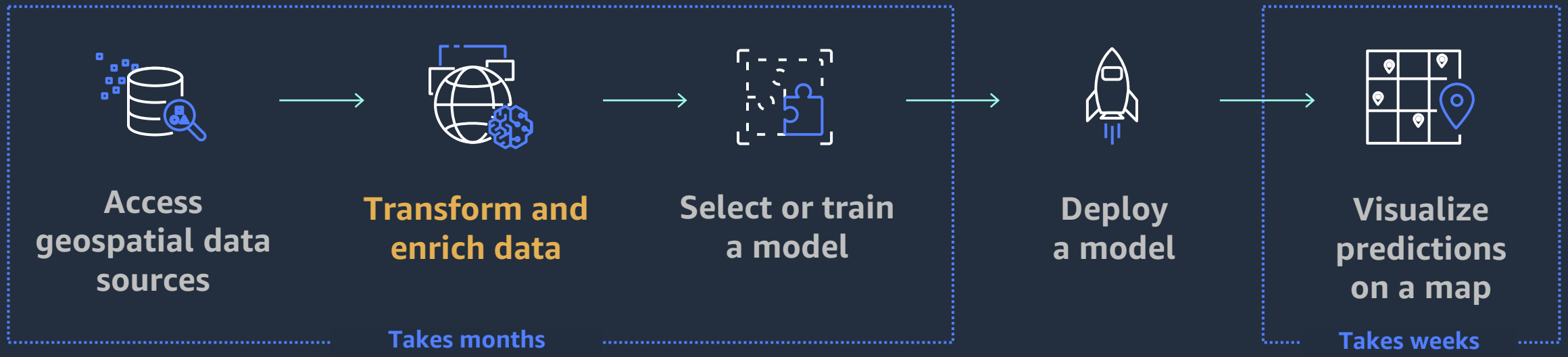
How Geospatial ML Works



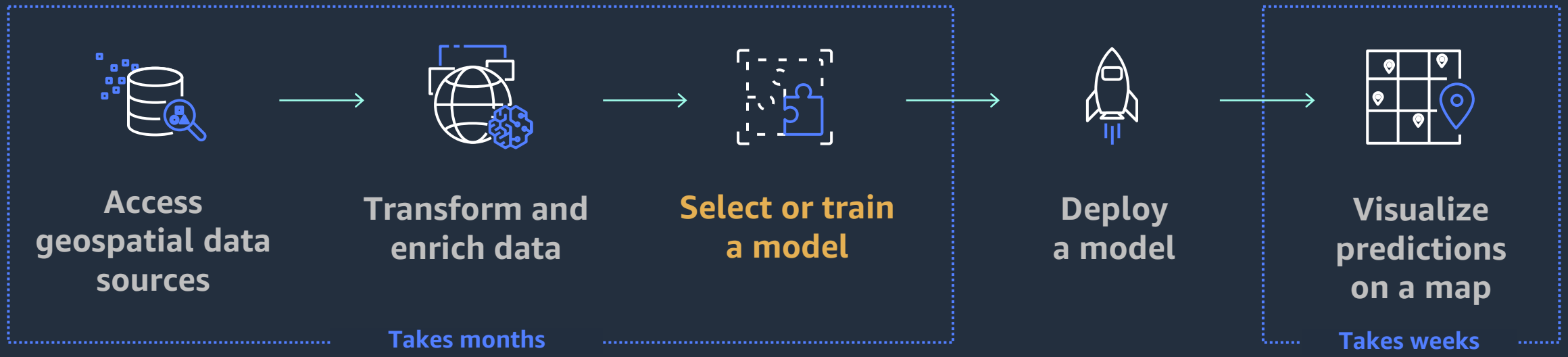
How Geospatial ML Works



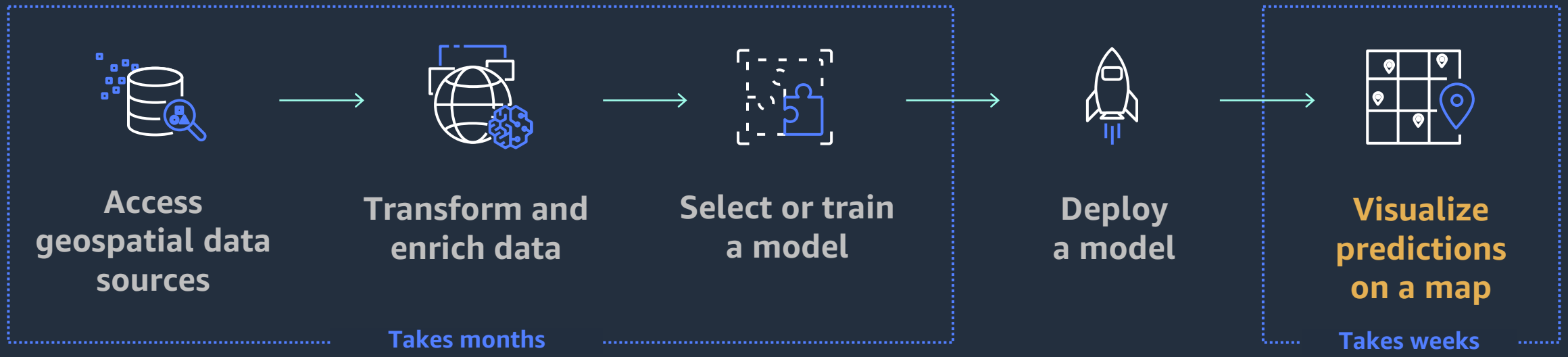
How Geospatial ML Works



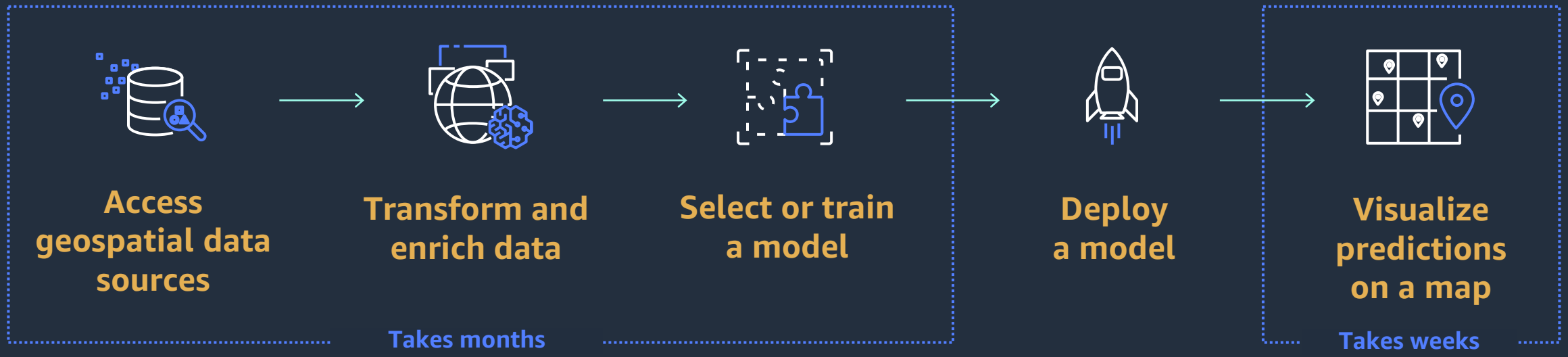
How Geospatial ML Works



How Geospatial ML Works



How Geospatial ML Works



SageMaker Now Supports Geospatial ML

(Preview)

Build, train, and deploy ML models using geospatial data

Access readily available geospatial data sources

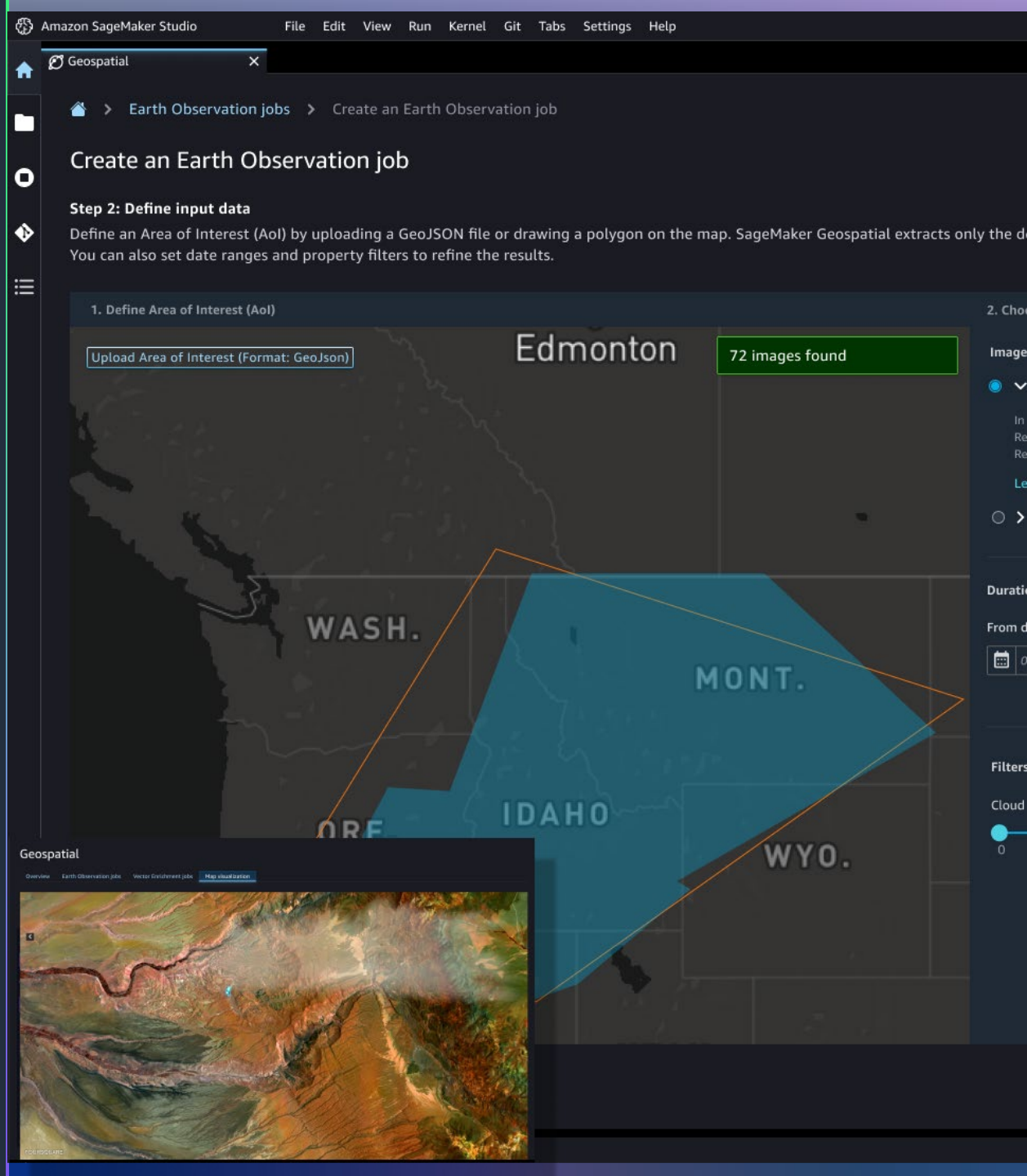
Efficiently process or enrich large-scale geospatial datasets

Accelerate model building with pretrained ML models

Analyze and explore predictions with visualization tools

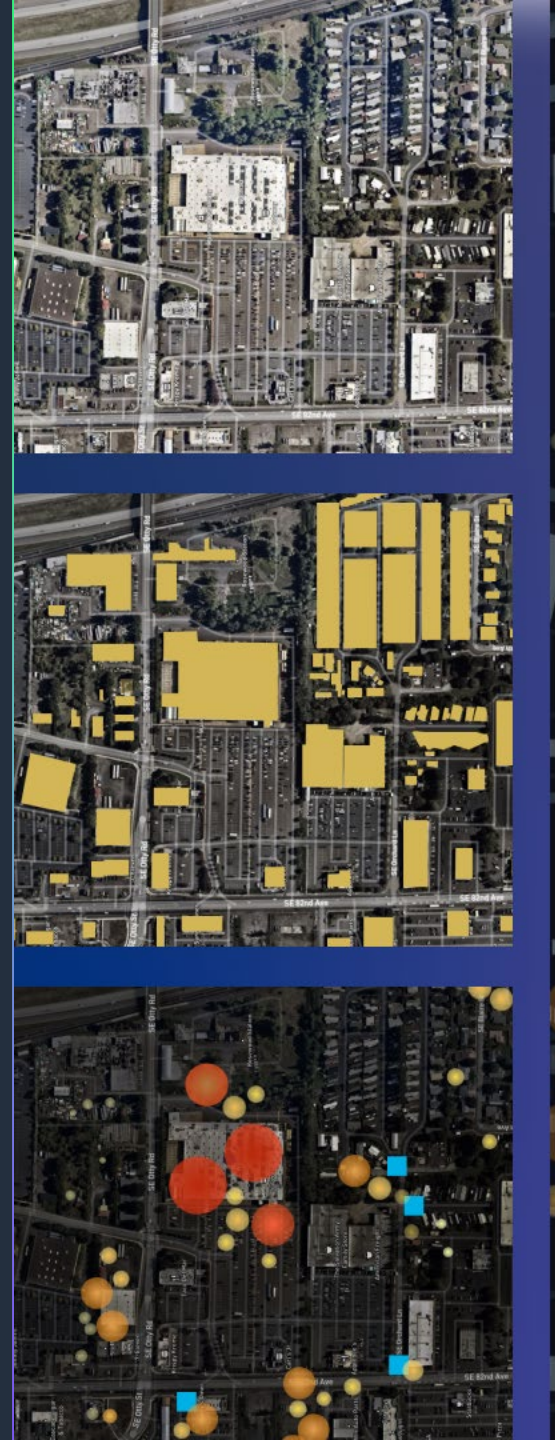
Access Geospatial Data

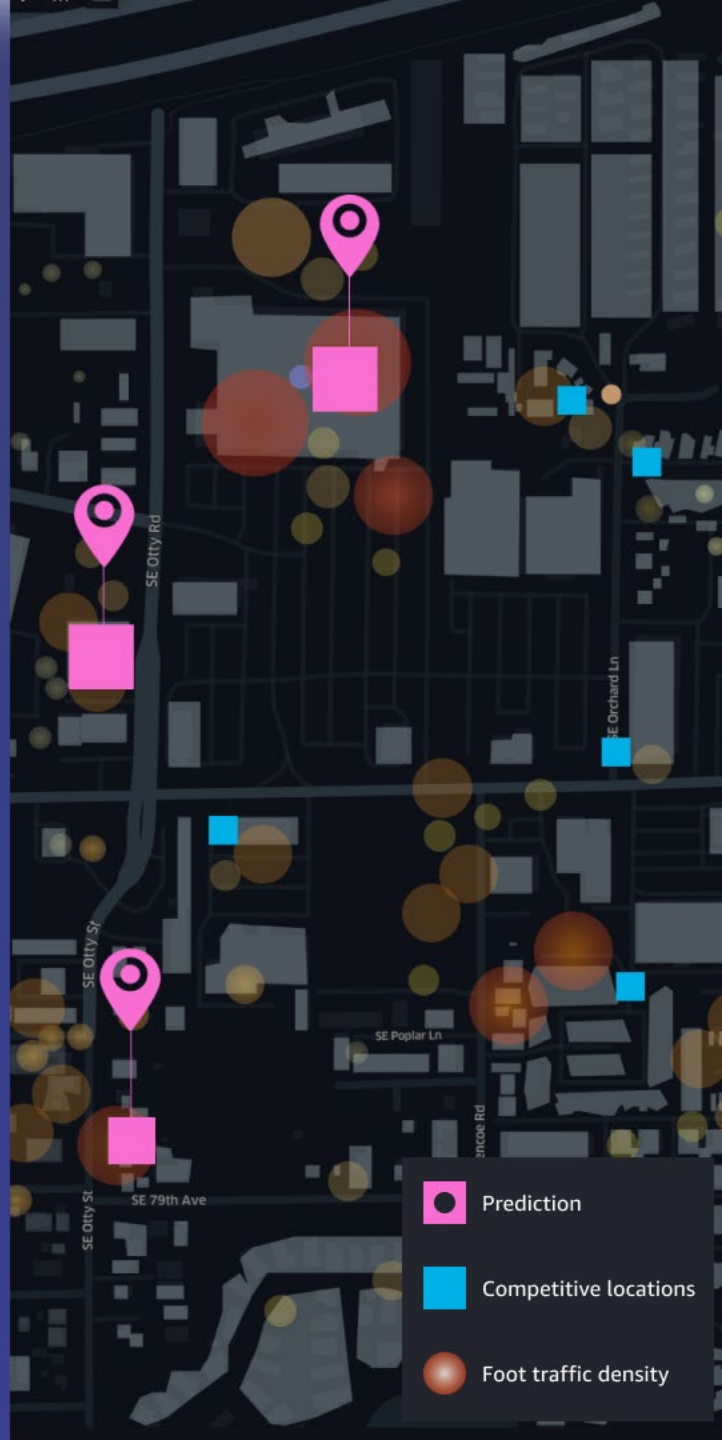
1. Open Data on AWS, such as Landsat 8, Sentinel 2
2. Bring your own satellite imagery or mapping data
3. Make your data set accessible to everyone in your organization



Transform & Enrich

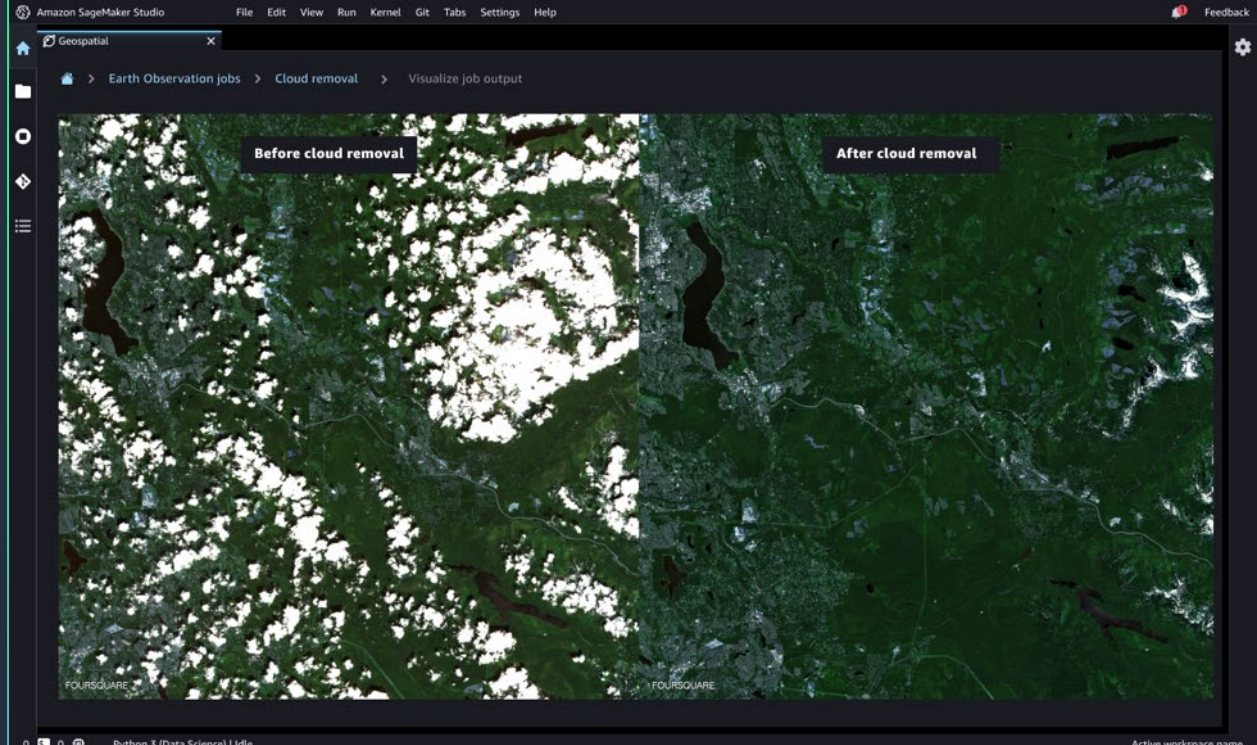
1. Easily available open-source libraires
2. Process with purpose-built earth observation jobs
3. Enrich map data with vector enrichment jobs





Select or Train a Model

1. Use state of the art pre-trained models
2. Create high-quality labels for geospatial datasets
3. Bring your own model or container



Visualize Predictions

1. Analyze and explore predictions on a map with 3D accelerated graphics
2. Visualization scales to render millions of points in the browser
3. Share predictions and map data across teams

SageMaker Studio & Sample geospatial notebooks

https://github.com/
aws/amazon-sagemaker-examples

More on SageMaker Geospatial:

March 24th - 15 minute webinar demo
March 31st - 60 minute deep dive session

Registration pages which will go live in February.

Thank you!

Mike Chambers
linkedin.com/in/mikegchambers