



Weather and Climate Applications

With the AWS Cloud

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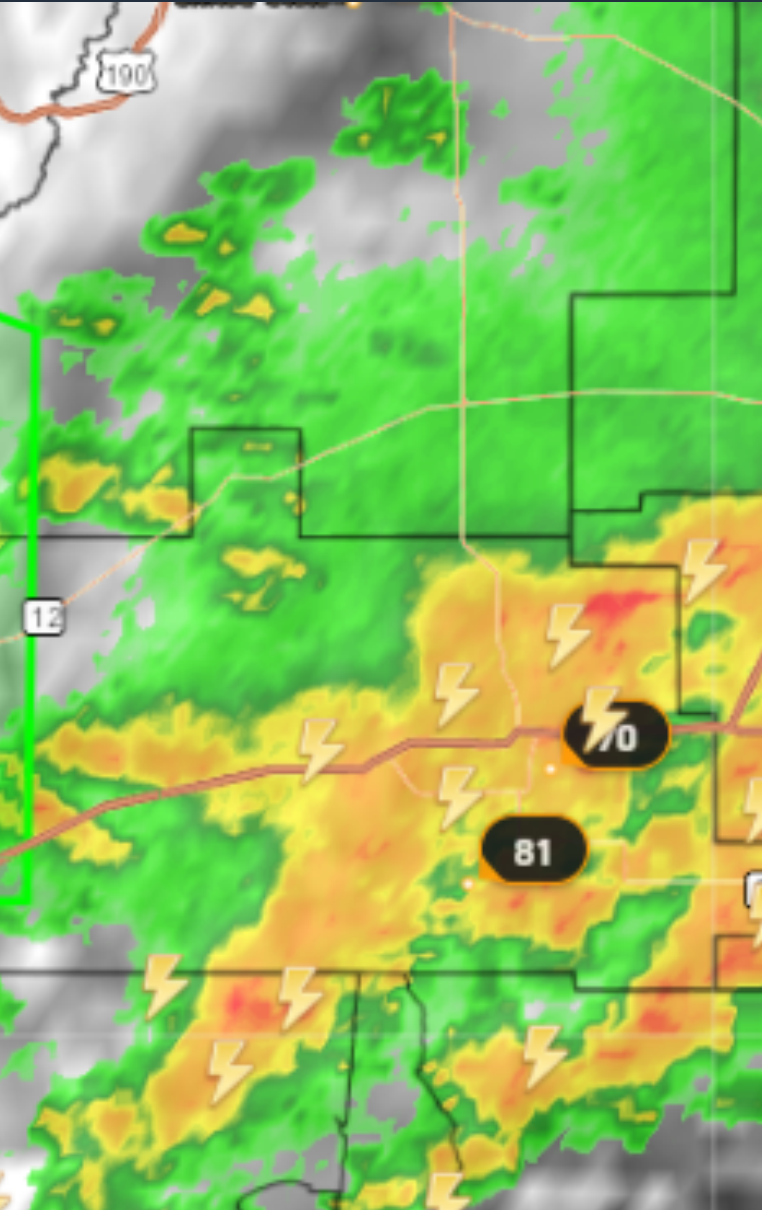
Agenda

- What is AWS?
- Weather and Climate Applications
- Customer stories
- AWS Services
- How to engage us

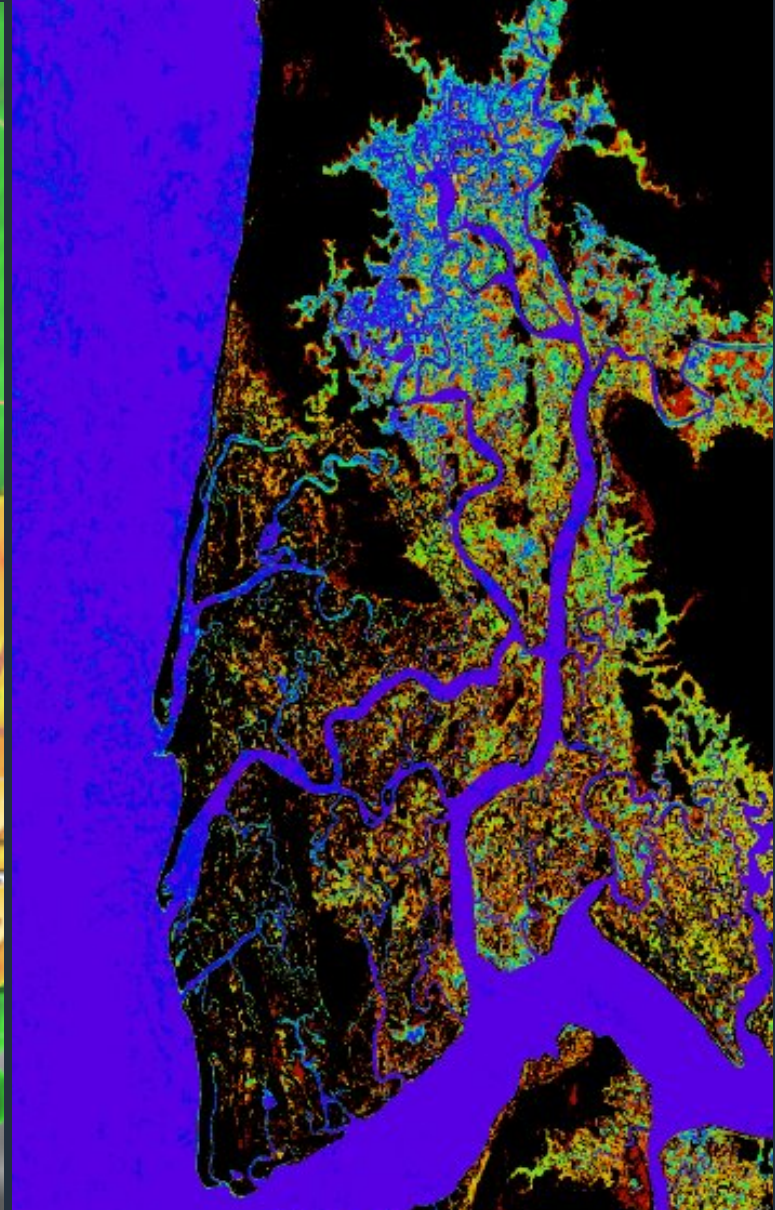
What is **Amazon Web Services (AWS)**?



**A broad and deep platform that helps customers
build sophisticated, scalable, secure applications**



Rapidly forecast weather reports



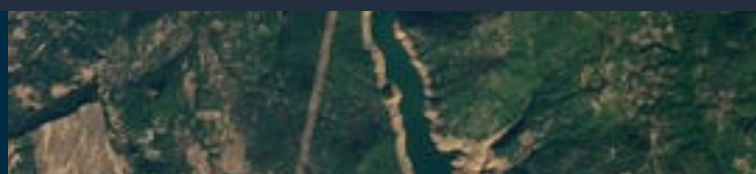
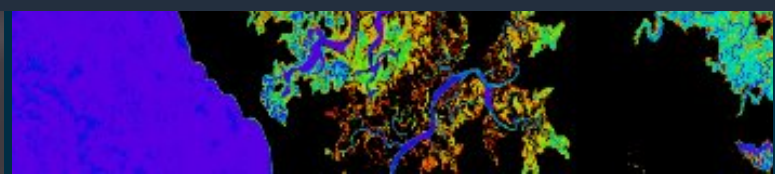
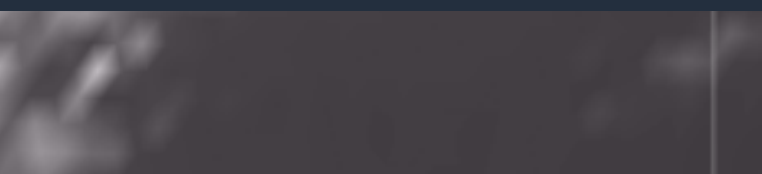
Drive data-driven insights for policy changes



Enable early detection and response of wildfires



Deliver real time updates of natural disasters



Rapidly forecast weather

Maxar uses AWS HPC to process massive weather data **58% faster than supercomputers** so customers can take proactive measures earlier against extreme weather.

EVENT: Severe Thunderstorm Warning
ISSUED: 2020-09-28 16:44:00
EXPIRES: 2020-09-28 17:15:00

MAXAR

Rapid data-driven insights for 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 enabling prompt government environmental policy changes.



Digital Earth
AFRICA

Early detection and response of wildfires

Fireball uses AWS to apply deep learning to satellite and ground-based sensor data to detect wildfires as early as **two minutes after ignition.**



Solar Superstorm detection

NASA is using unsupervised learning and anomaly detection to detect solar superstorms. With AWS superstorms can be carried out by sifting through as many as **1,000 data sets at a time.**



Deliver real-time updates of natural disasters

NOAA used AWS CloudFront to serve **over one billion requests** on Hurricanes.gov in a single day, giving residents and first responders critical information to prepare.



Monitor the impact of extreme weather events

MBRSC uses AWS Ground Station to support UAE and help governmental agencies and first responders monitor and assess the impact of extreme weather events.

مركز محمد بن راشد
للفضاء

MOHAMMED BIN RASHID SPACE CENTRE

Broad and Deep Functionality



How to engage us



DISCOVERY

Let's work backwards



TRAINING

Skills and
competencies



DEVELOP & PILOT

Proof of concept



PARTNERSHIP

Solutions and go to
market



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