

Tomorrow.io

Presentation to The Committee on Earth Science and Applications from Space



Agenda

Tomorrow.io Introduction

Tomorrow.io's Satellite Capabilities

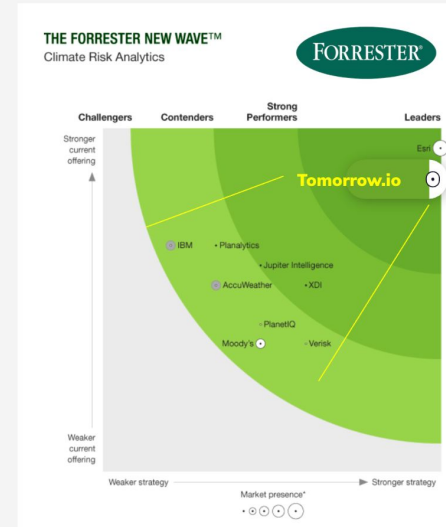
NOAA/NASA Collaboration Highlights

Tomorrow.io at a Glance

Leading the Way in Global Weather Readiness

- 2016 Founded in Boston
- +150 employees worldwide
- \$300M in funding raised
- +200 Enterprise and Government customers worldwide
- +100K Developers on the platform
- Millions of App downloads

Market Leader.



tomorrow.io

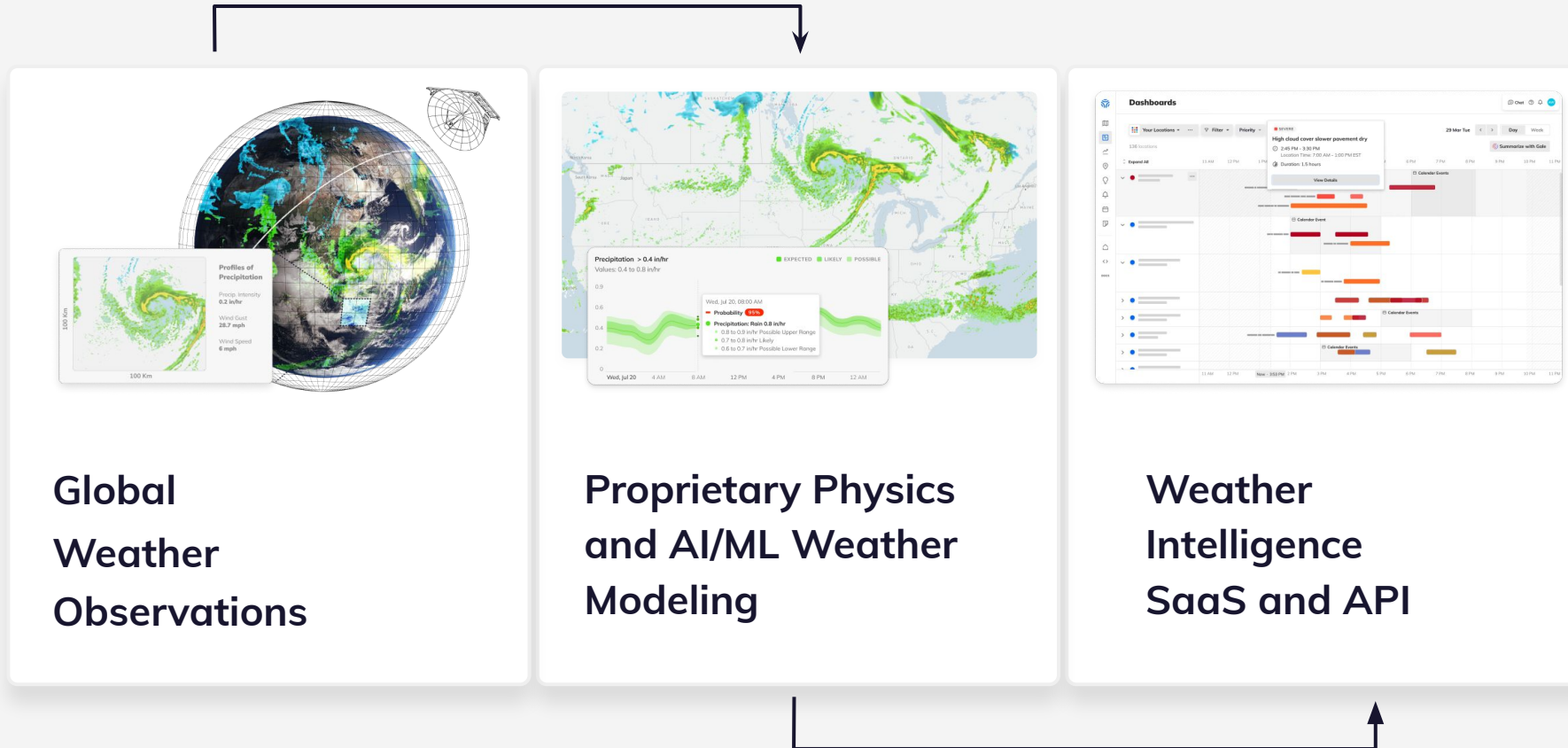


Uber



DELTA

Innovating Across the Weather Value Chain



Tomorrow.io's Satellite Capabilities

Tomorrow.io Gen-1 Constellation

Hybrid constellation of 24 small satellites in Low Earth Orbit

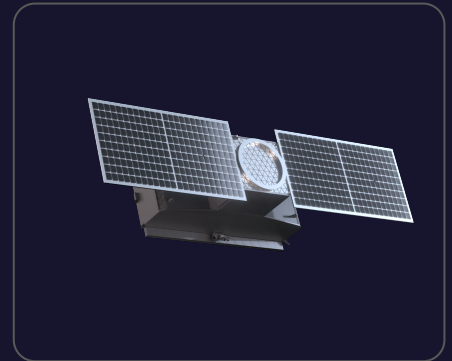
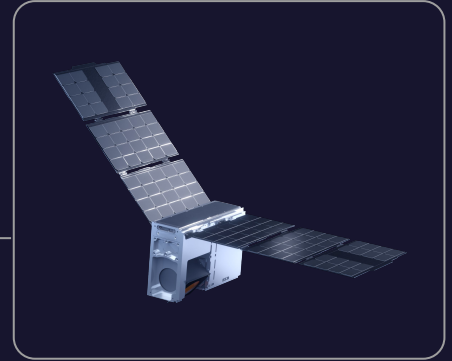
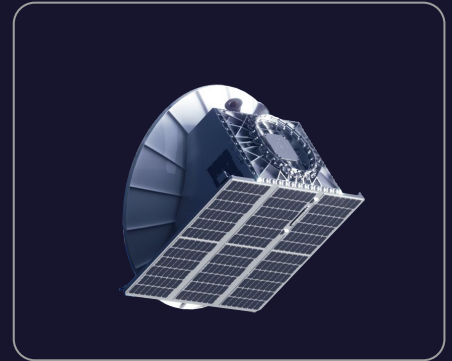
- 14 Microwave Sounders
- 8 Precipitation Radars

Capabilities:

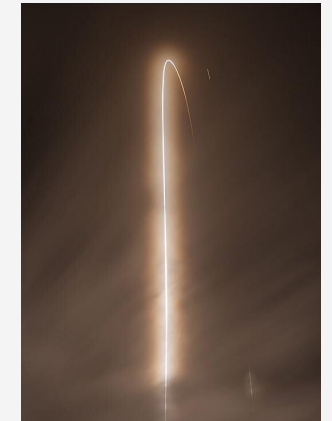
- Full Global Coverage
- <1 hour average revisit rate
- World's first near real-time precipitation measurements and 3D atmospheric profiles
- Dramatic improvement in real-time weather forecasts, tropical cyclone warnings, and flood alerts

Outlook:

- 2 Radars and 8 Sounders launched
- Sounders constellation IOC early 2025 and continuing to launch through 2028+



Deployed 8 Successful Satellites to Date, 14 More Scheduled For 2025-2026

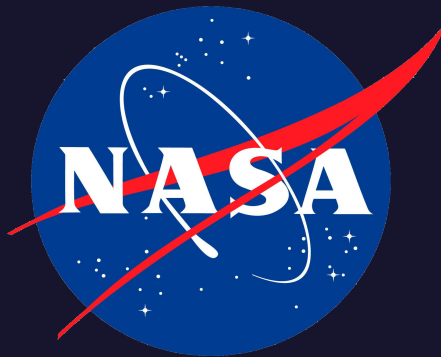
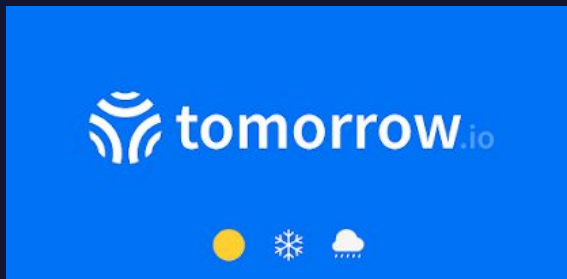


Tomorrow.io Expands Global Constellation with Microwave Sounders Launch



The launch includes two sounder-equipped satellites, paving the way for future hourly global weather coverage

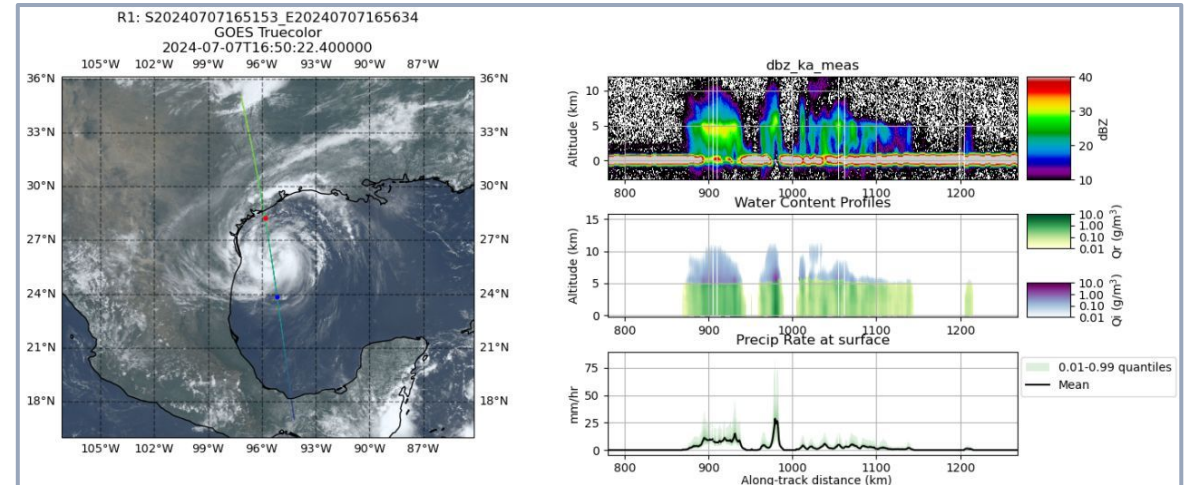




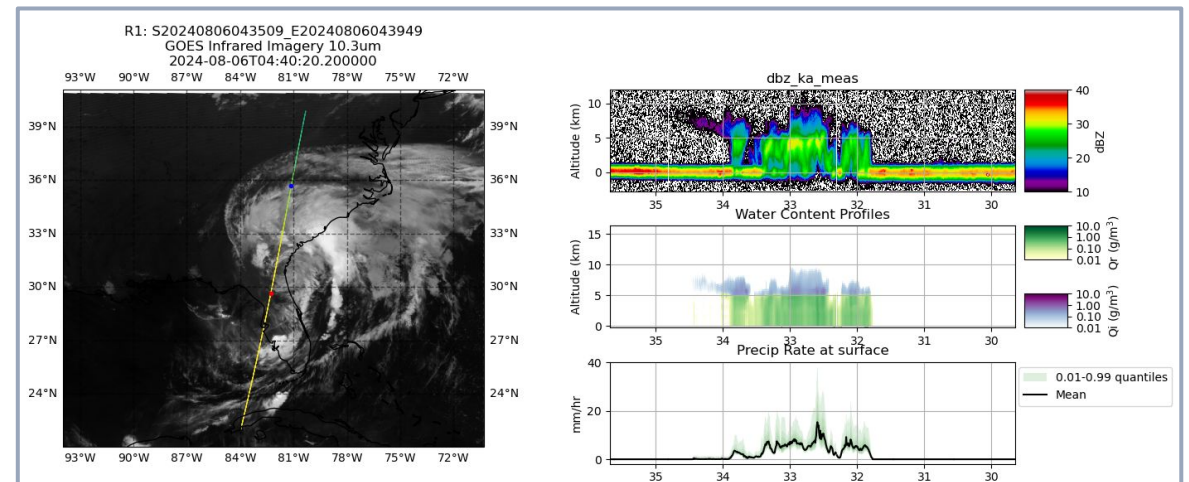
Tomorrow.io Radar Pathfinders

- Tomorrow.io's Pathfinder satellites (Tomorrow-R1 and R2) extend the legacy of spaceborne precipitation radar from NASA's TRMM and GPM missions, and prove the feasibility of low-cost smallsat radar demonstrated by RainCube.
- Tomorrow's advanced algorithms (Level 1 & 2) that generate calibrated Ka-band radar reflectivity profiles use training from GPM data

Beryl



Debby

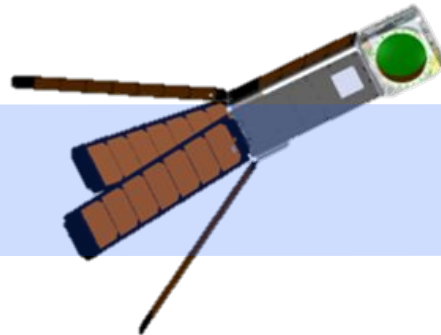


Tomorrow.io Microwave Sounders

- Tomorrow.io partnered with MIT Lincoln Laboratory to develop the Tomorrow.io Microwave Sounder (TMS) from the NASA TROPICS mission
- TMS leveraged a decade of NASA ESTO investments (starting with MicroMAS) to develop high-quality Cubesat microwave sounding technologies

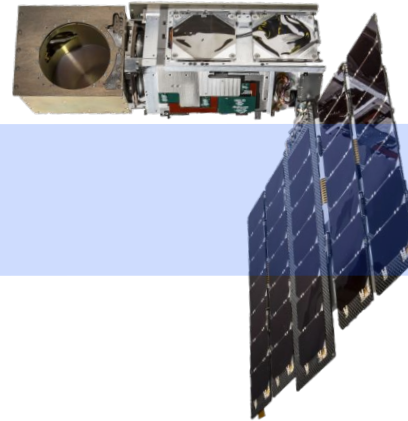
First CubeSat
MW sounder
demonstration

MicroMAS-2a
Deployed Jan 2018



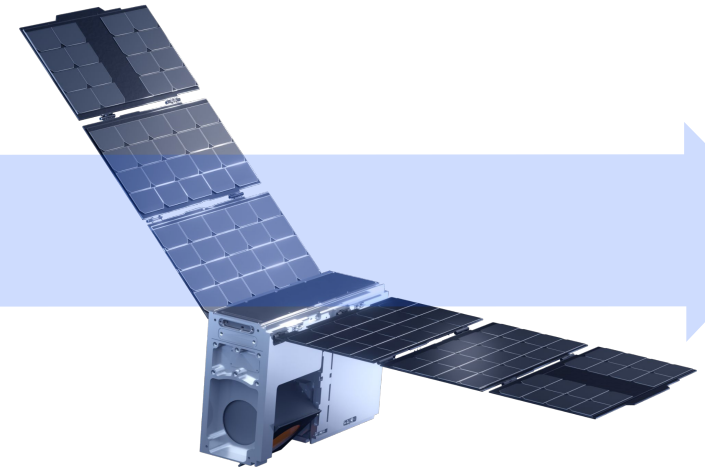
First CubeSat MW sounder
to provide a global image

NASA TROPICS
Launched 2021-2023



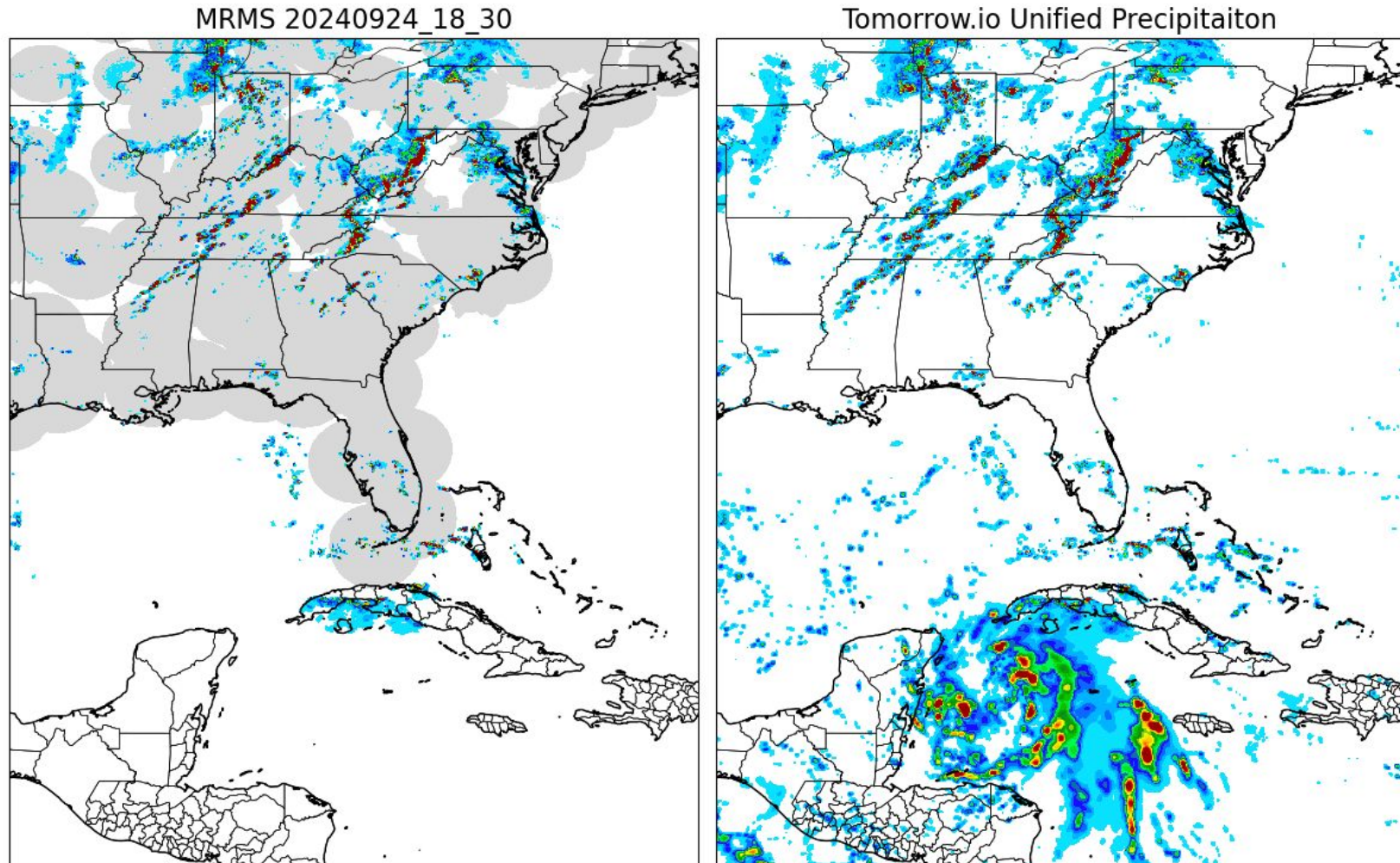
First commercial CubeSat
MW sounder constellation

**Tomorrow.io
Constellation**
Launches 2024-2025



Tomorrow.io Global Unified Precipitation

- Tomorrow.io leverages multi-channel geostationary and orbiting passive microwave sensors (e.g., NASA GMI and Tomorrow.io TMS) for global near-real time precipitation retrievals in regions not covered by terrestrial radar.
- End result is a seamless global precipitation product that extends beyond the reaches of terrestrial radar products
- Unmatched scans of Hurricane Helene



In Age of AI, Data is Gold

AI-based weather models are revolutionizing forecasting, making observations the **key differentiator**

Historically, only heavily funded government agencies had the resources to develop and operate global weather forecasting systems.

AI has shattered this monopoly, making it faster, cheaper, and easier to generate global forecasts.

But - AI Models are only as good as the data they ingest. Access to proprietary data becomes key to achieving dominance in weather intelligence.

For the U.S. to stay competitive, we must make a bold leap in weather observations by expanding coverage, enhancing accuracy, and accelerating data delivery.

The Value of Observations for AI



Model Training

Anomaly Detection

Initialization

New Data Innovations

Validation & QA

Thank You