VHR SAR Imagery for a fast-changing world!

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Capella Space

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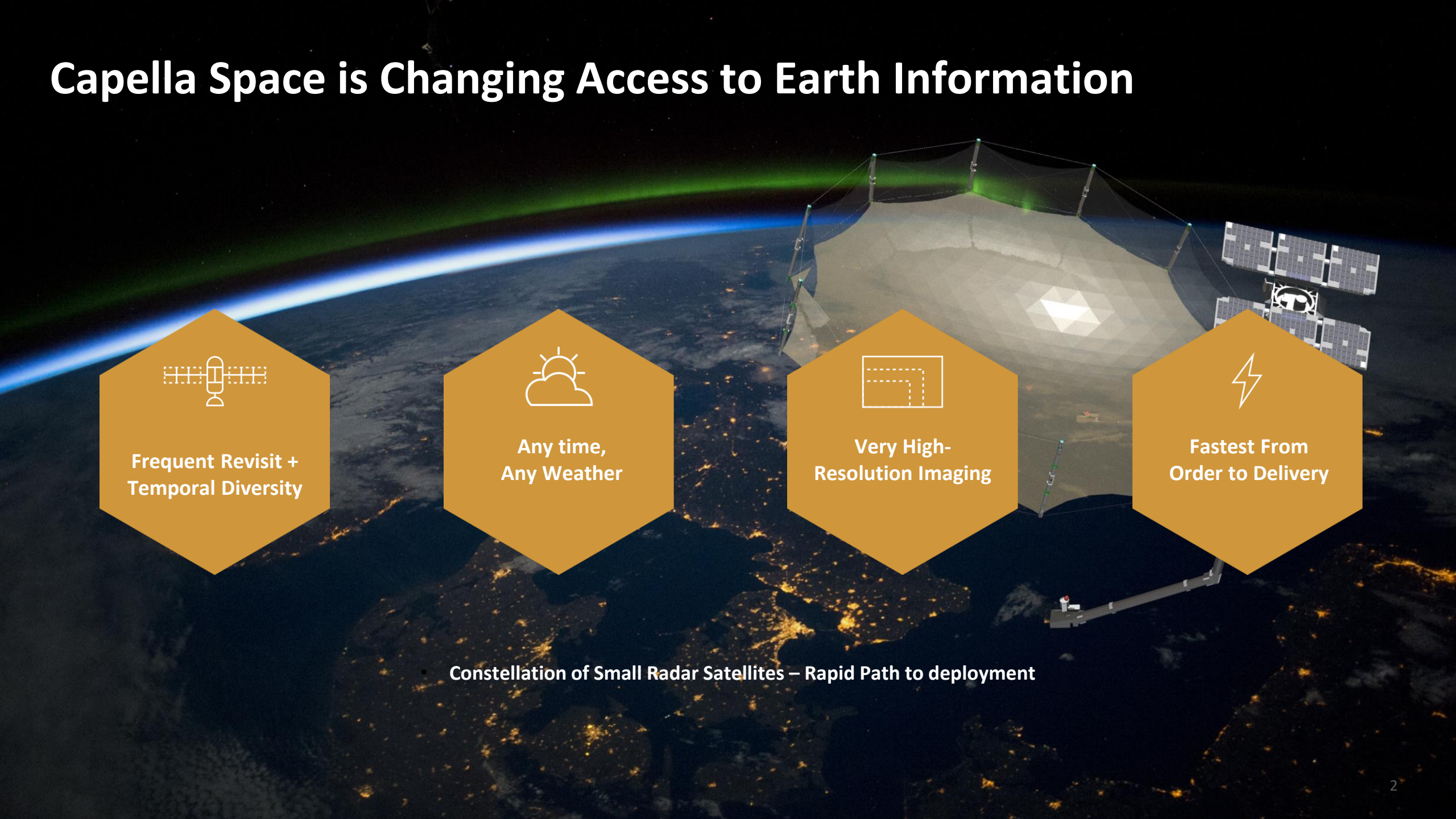
Capella Space is Changing Access to Earth Information



Frequent Revisit + Temporal Diversity

Any time, Any Weather

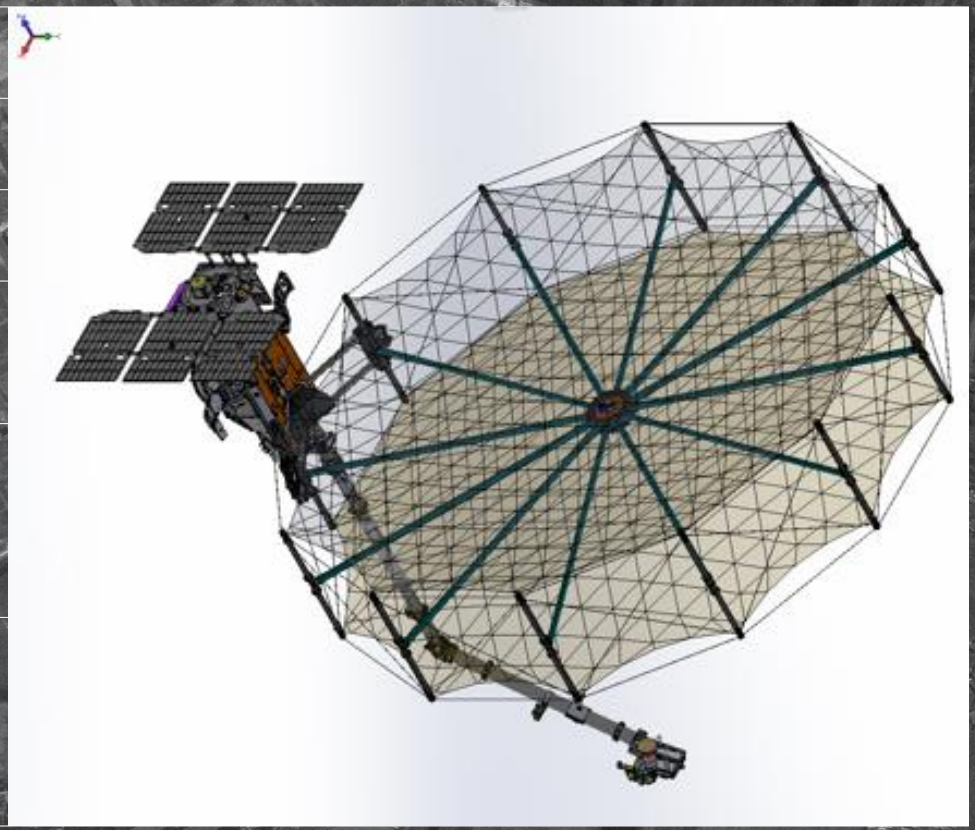
Very High-Resolution Imaging

Fastest From Order to Delivery

- **Constellation of Small Radar Satellites – Rapid Path to deployment**

Capella SAR Imaging- Current Generation

Central Frequency	X-Band
Polarization	Single-Pol HH or VV
Imaging Bandwidth	Up to 500 MHz
Acquisition Direction	Ascending+Descending Orbit Direction Left+Right Look Direction
Imaging Modes	Spotlight Sliding Spotlight Stripmap
SAR Imagery Products	Spot (spotlight imaging mode) Site (sliding spotlight imaging mode) Strip (stripmap imaging mode)



On-orbit view of Antenna

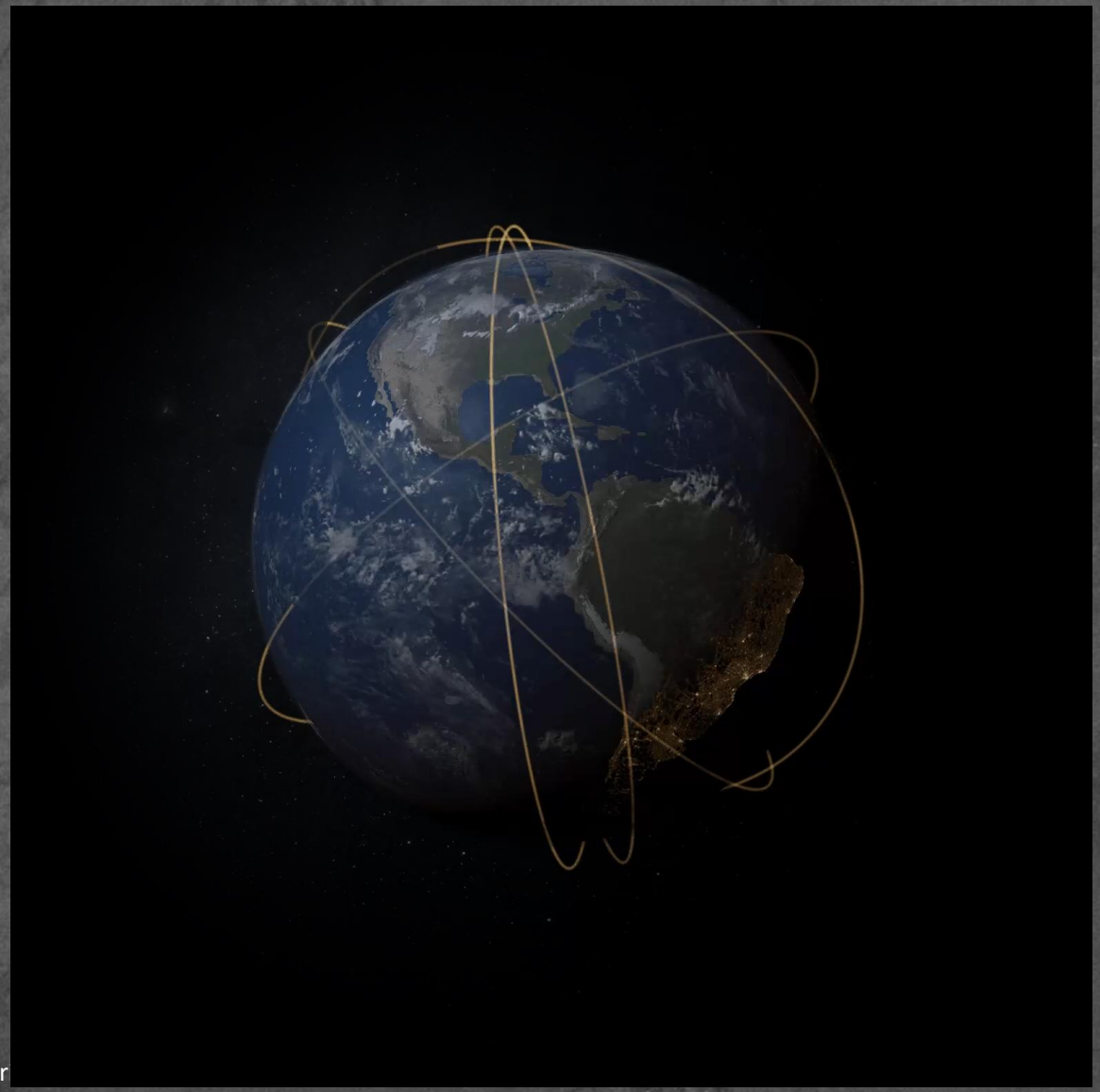
SAR Imagery Products

Capella Space

SAR Imagery Product Scenes

Priority Ordering Tiers	**1-Day, 3-Day, 7-Day**		
Orbital Diversity	45° INC, 53° INC, 97° SSO		
Collection Geometries	Ascending, Descending, Left, Right		
Imaging Modes	Spotlight	Sliding Spotlight	Stripmap
Scene Length(s)	5 km	10 km – 50 km	20 km – 200 km
Scene Width(s)	5 km	5 km	5 km – 10 km
Look Angle Range	5° – 40°	5° – 45°	5° – 45°
Azimuth Resolution	0.5 m	1.0 m	1.2 m
Slant Range Resolution	0.3 m	0.5 m	0.75 m
Ground Range Resolution	0.5 m – 3.1 m	0.7 m – 5.0 m	1.1 m – 11.5 m
Number of Looks	1 – 9	1 – 5	1

Capella’s Orbits provide unmatched Temporal & Orbital Diversity



Unmatched Temporal & Orbital Diversity

Monitor all day, throughout the day, every single day. A capability unique to the Capella SAR constellation

Ukraine Conflict AOR, 2022

2022-03-05T23:34:38.292Z

2022-03-05T19:31:30.090Z

2022-03-05T19:26:49.361Z

2022-03-05T19:24:54.499Z

2022-03-05T12:50:21.650Z

2022-03-05T12:23:08.159Z

2022-03-05T11:52:37.341Z

2022-03-05T10:43:42.998Z

2022-03-05T10:12:19.350Z

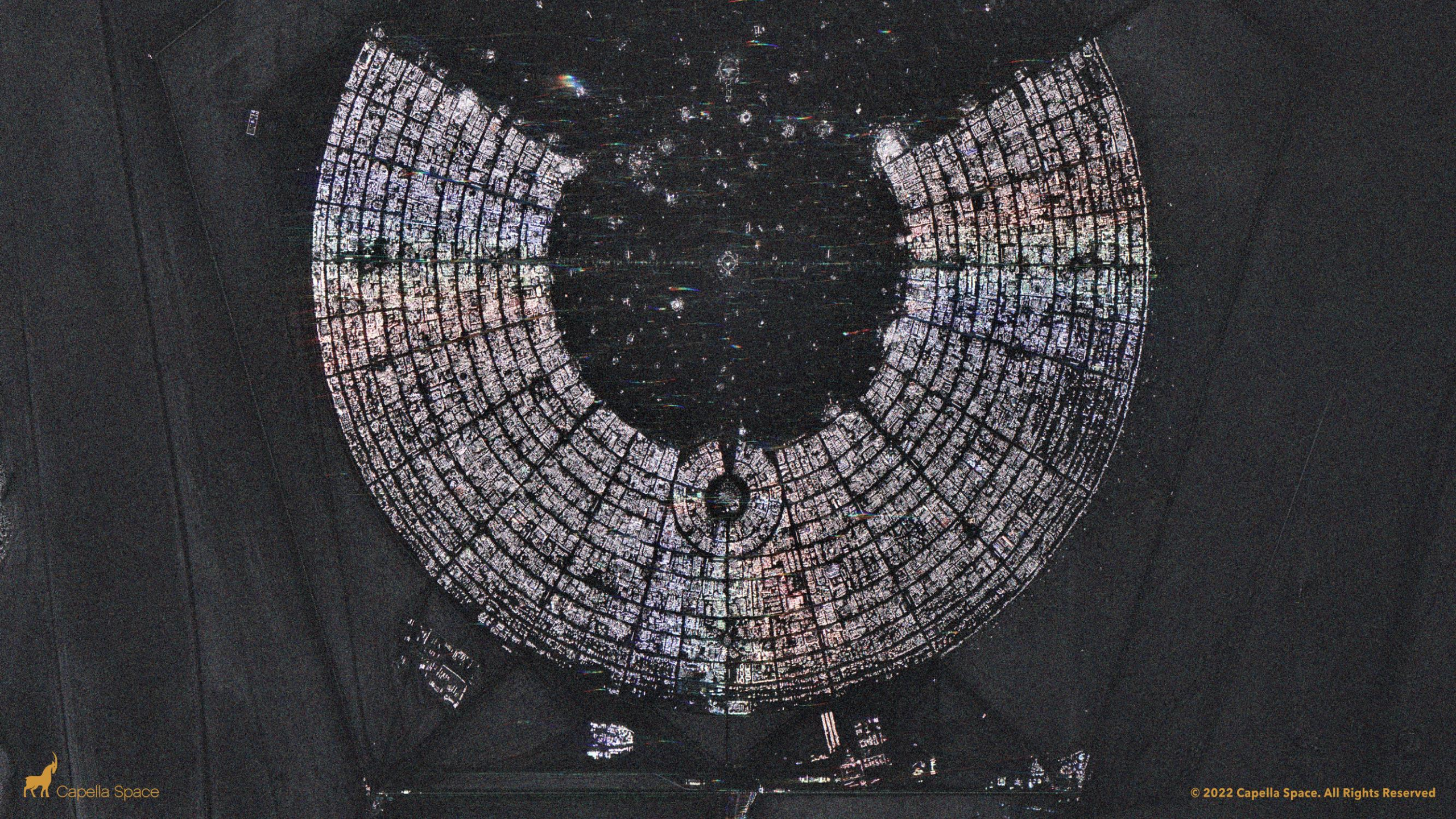
2022-03-05T08:41:25.168Z

2022-03-05T08:40:20.321Z

2022-03-05T07:13:33.203Z

2022-03-05T07:11:21.169Z

2022-03-05T06:52:29.894Z



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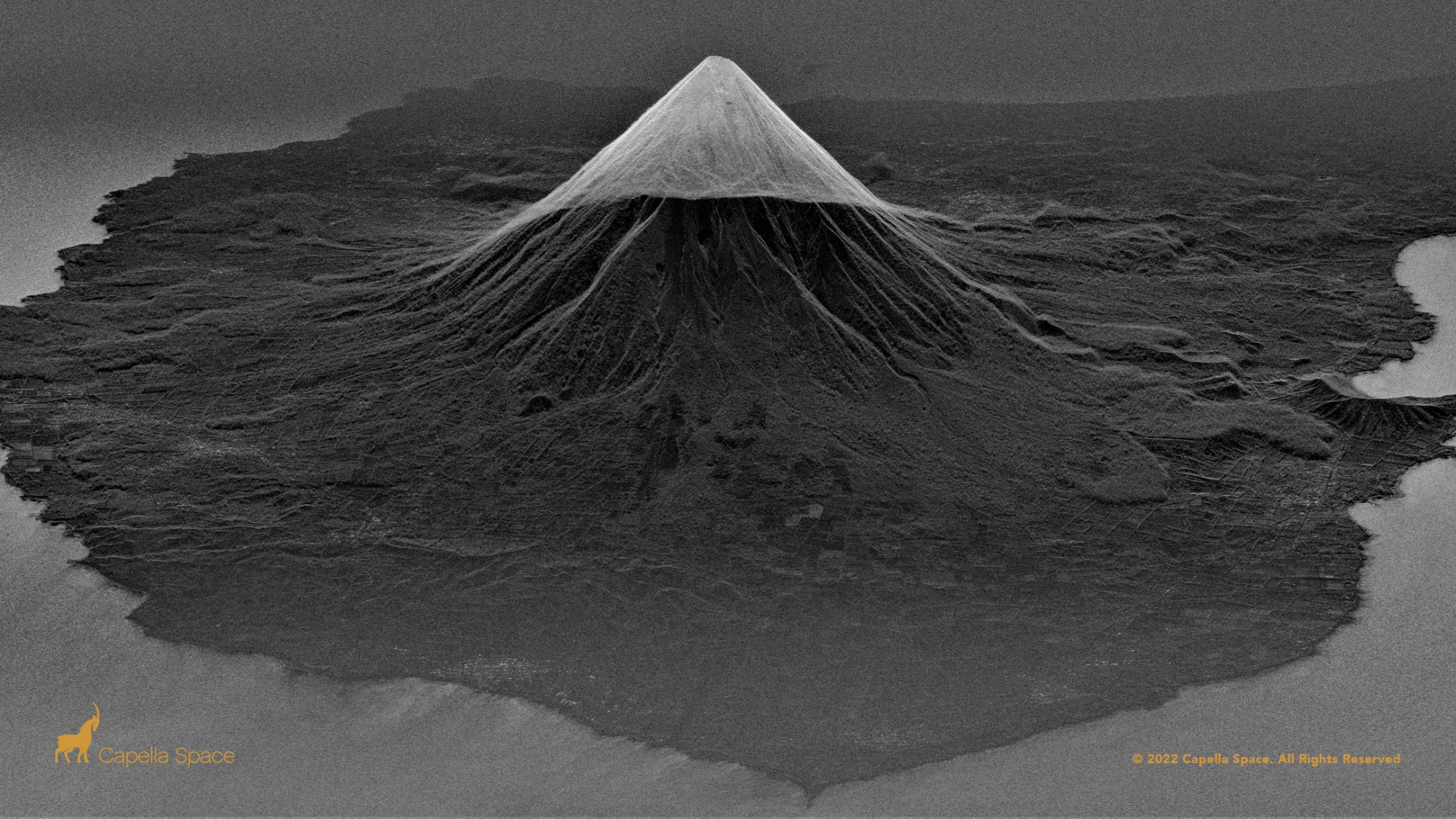

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Building Automation:

CONOPS, Ground Segment & Tasking Platform

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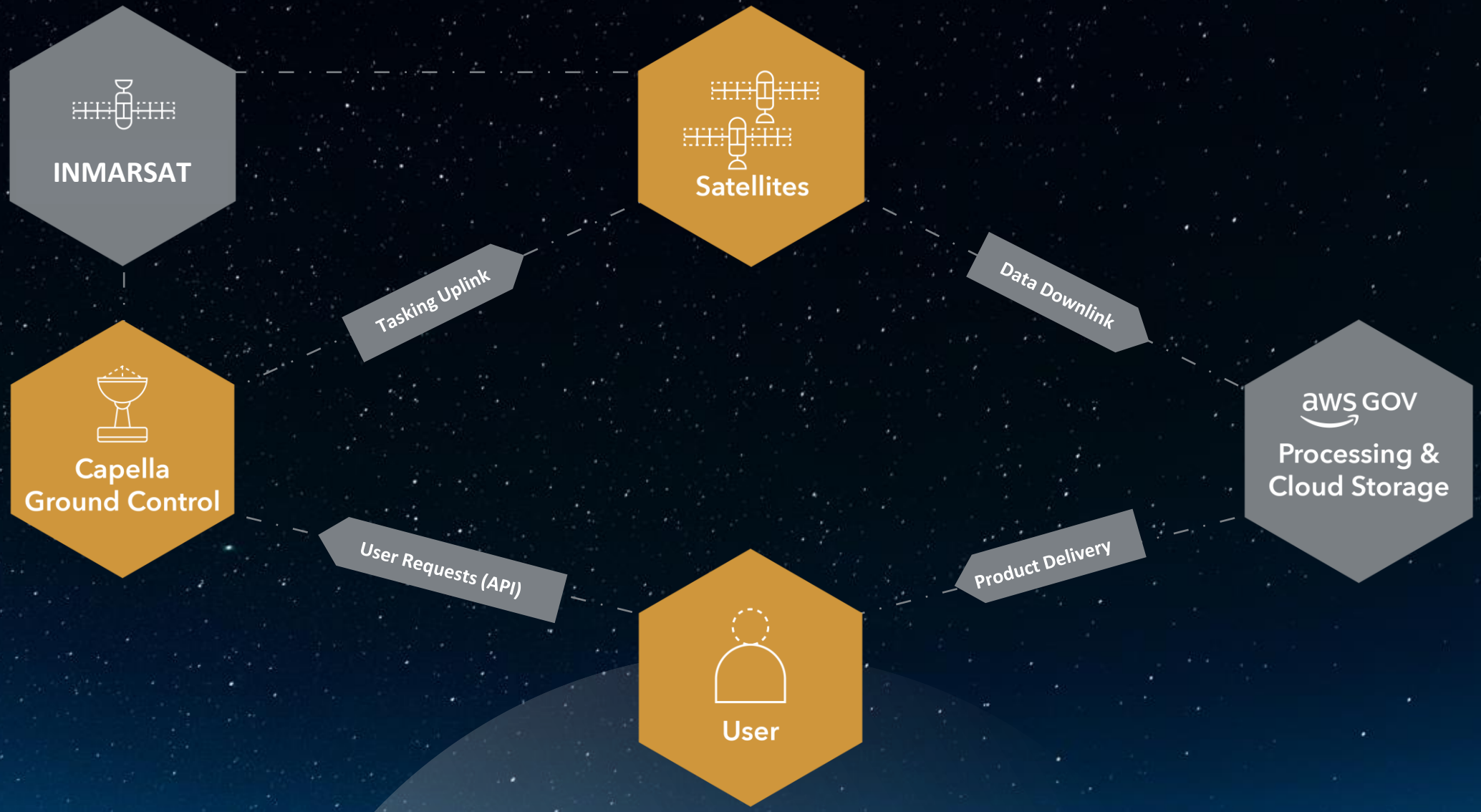
Nominal Tasking & Delivery

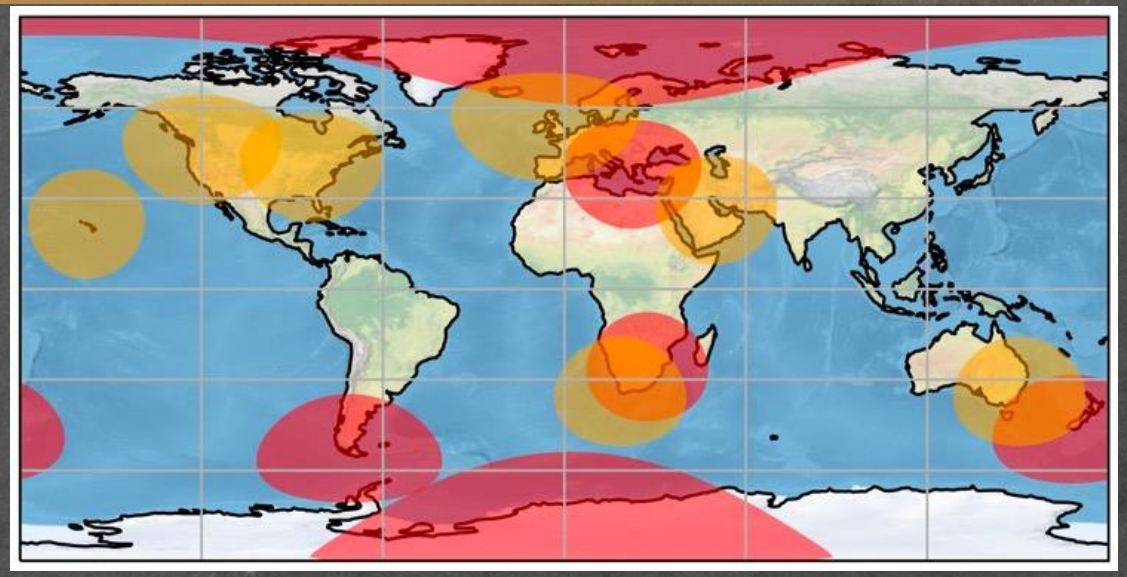


Capella Rapid Response And Low Latency Delivery

- **Reactive low-latency imaging system**
- **Fast data turn around times**
- **Fully-automated**, and **Secure**

aws

KSAT KONGSBERG SATELLITE SERVICES



1 EXAMINE IMAGING OPPORTUNITIES — Now

2 CONFIRMED TASKING REQUEST — < 30 min

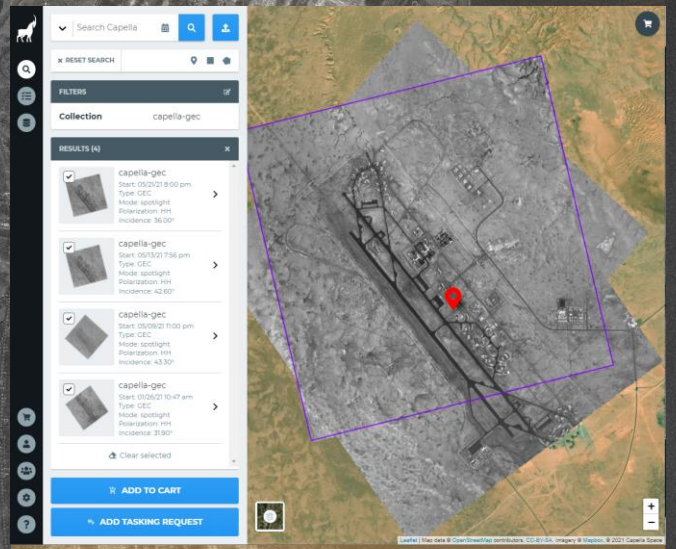
3 SCHEDULE UPLINKED

4 TRANSIT TO AOR + TARGET IMAGING

5 DATA DOWNLINK PROCESSING + DATA DELIVERY — < 6 hours

REACTIVE TASKING | VHR IMAGING | LOW LATENCY

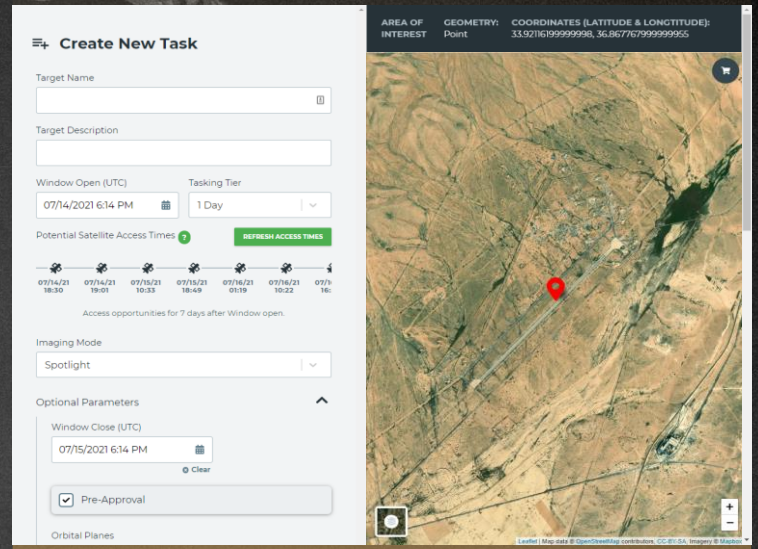
Capella User Console Interface & API



Catalog Browsing & API Integration

Full catalog of historical collection for baseline metrics & pattern of life analysis.

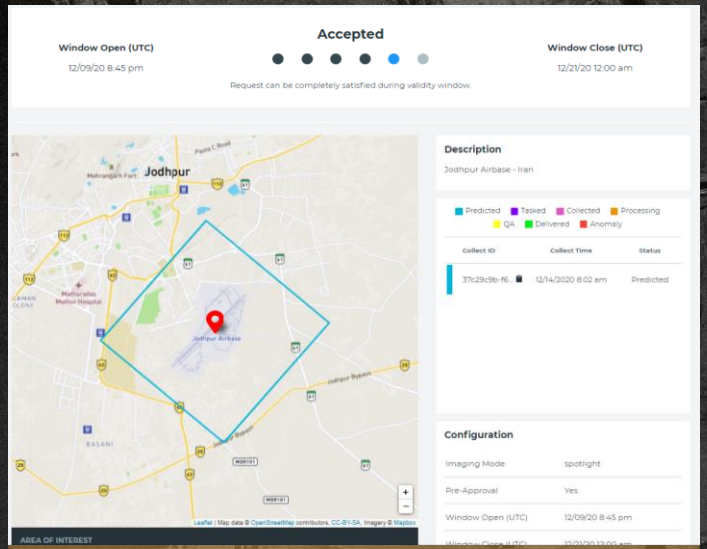
Tip-and-cue scenario for immediate responsiveness via API integration.



Simple-to-Use GUI

Task or purchase archived imagery via coordinates, AOI creation tool or shapefile upload.

Fully automated and secure operations: Satellite ops, SAR processing and data storage are cloud based, fully confidential.



Real-Time Status Updates

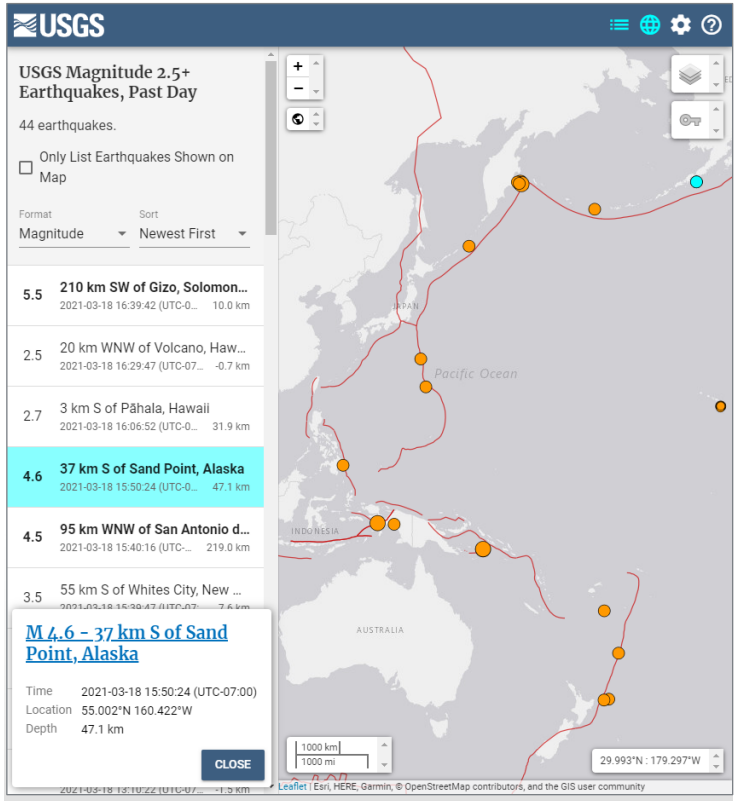
New tasking scheduling in ≤ 15 minutes and users are provided real-time status updates.

React to emergencies in real-time.

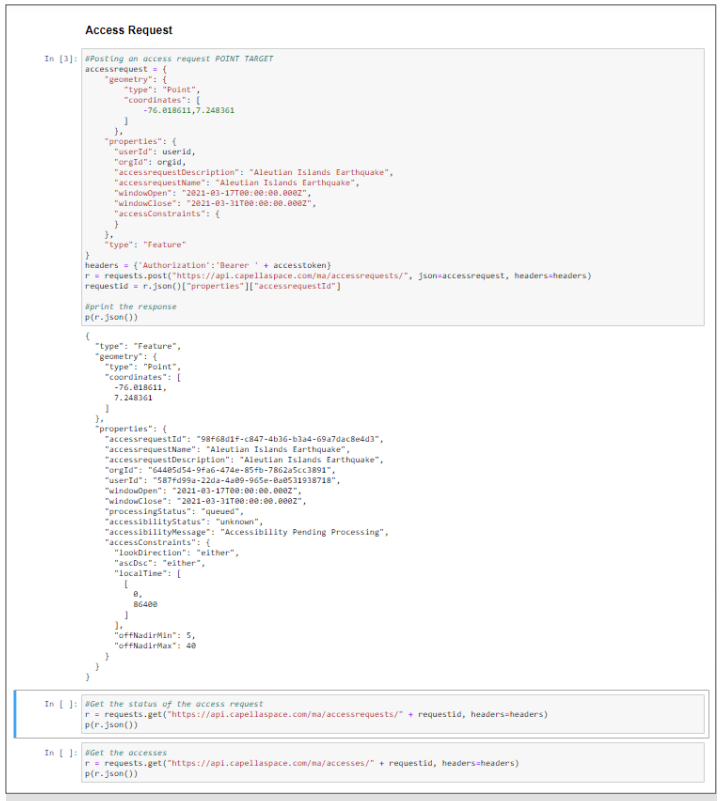
Deliver to teams on the ground hours after capture.

Capella API Integration

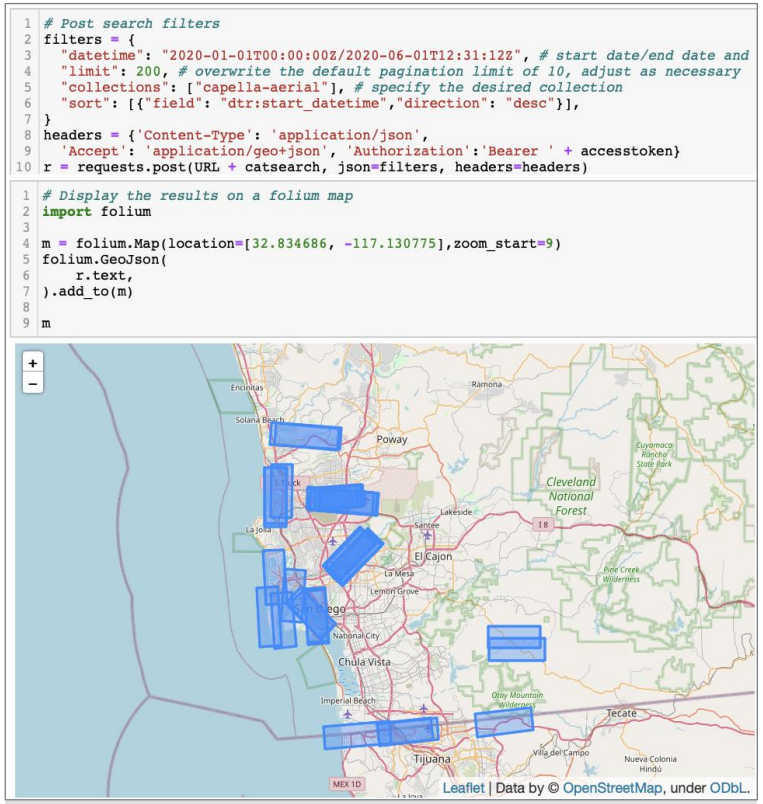
- Tip-and-cue scenario for immediate responsiveness via API integration. Existing system alerts can push task requests.
- React to emergencies in real-time. Deliver data to teams on the ground hours after image capture.



Queue from Existing Systems



Task the Capella Constellation



Pull Scenes & Metadata

Custom SAR Imagery Products

Power to control SAR imaging acquisition parameters to get the exact data products that meet your specific needs

Custom Imaging Parameters			
Window Open	Window Close	Tasking Tier	Imaging Mode
Scene Length	Look Direction	Look Angle Minimum	Look Angle Maximum
Ascending / Descending		Azimuth Resolution Minimum	Azimuth Resolution Maximum
Number Of Looks	Ground Range Resolution Minimum		Ground Range Resolution Maximum

Demo