Planet's New Space Approach to Complement Sentinel Missions

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You can’t fix what you can’t see.

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PLANET'S MISSION

To image the whole world every day, making change **visible, accessible, and actionable**.

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PLANET CURRENT OFFER TO Copernicus USERS

Streaming Services

PlanetScope (VHR2) Archive & Monitoring

VHR1 archive and tasking with intra-day revisit

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The traditional approach is falling short

Limited coverage

Low revisit

Inefficient access

Signal vs noise

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And consequences are profound

Overspending & budget loss

Security risks

Ineffective policies

Loss of citizen trust

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A new approach

Planet provides geospatial data at the speed of change, equipping users with the data necessary for making informed, timely decisions.

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New Space approach is key for solving global challenges and is proposed for Copernicus services

DIGITAL TRANSFORMATION

SUSTAINABILITY TRANSFORMATION

Making Use of Data Economies of Scale

- Data-as-a service, subscriptions to defined areas with constant updates
- Flat rate partnerships (“all you can use”)

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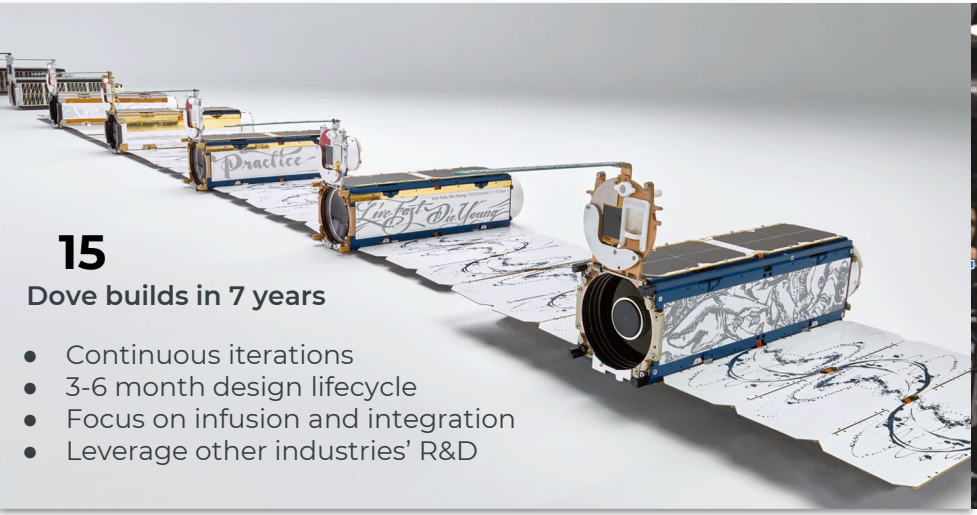
Agile Aerospace - from satellite design to data delivery



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Dove builds in 7 years

- Continuous iterations
- 3-6 month design lifecycle
- Focus on infusion and integration
- Leverage other industries' R&D

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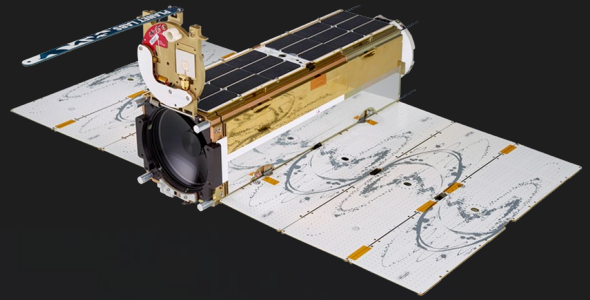

(Super)Doves

SATELLITES	GSD	CAPACITY
~200	**3.7 m**	**350 million km²**/day

ORBIT ALTITUDE	SPECTRAL BANDS
475 km	**RGB + Green II, Red Edge, Yellow, Coastal Blue,** and **NIR**

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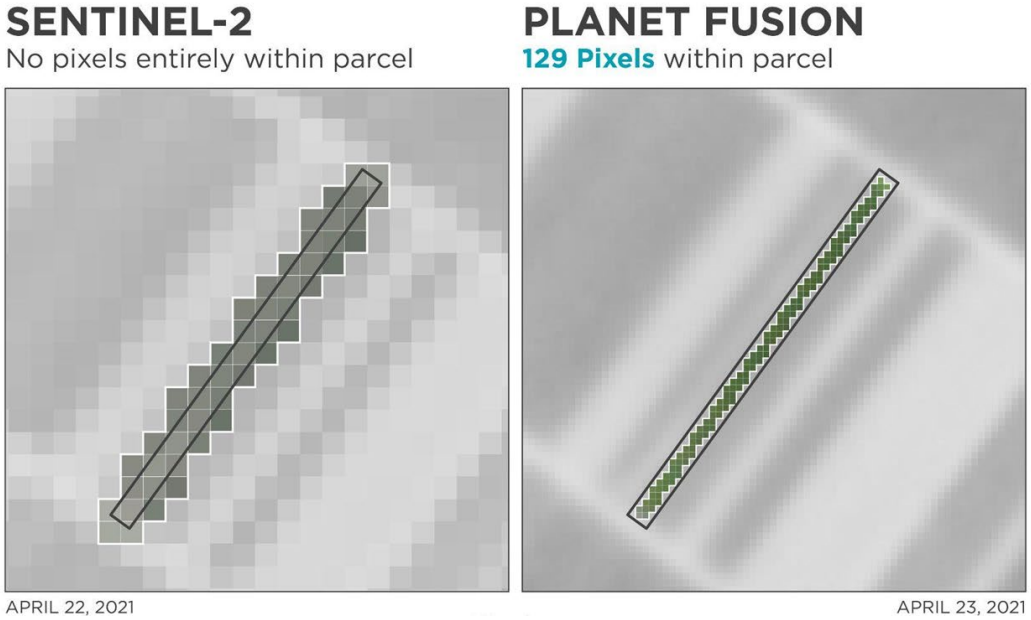
AN AVERAGE OF
1700
IMAGES FOR EVERY PLACE ON EARTH

Complementary use of PlanetScope and Sentinel-2 data

AG Monitoring of Small and Narrow parcels

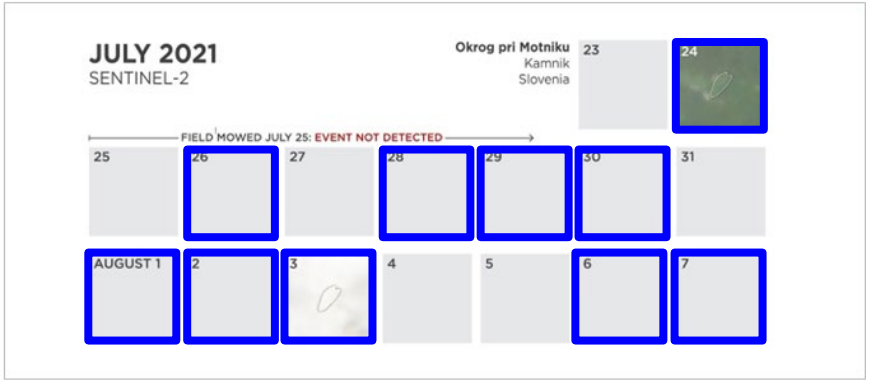
Sentinel-2 is the preferred data source for large area AG monitoring. Size and geometry pose a challenge for 10m Sentinel-2 resolution.

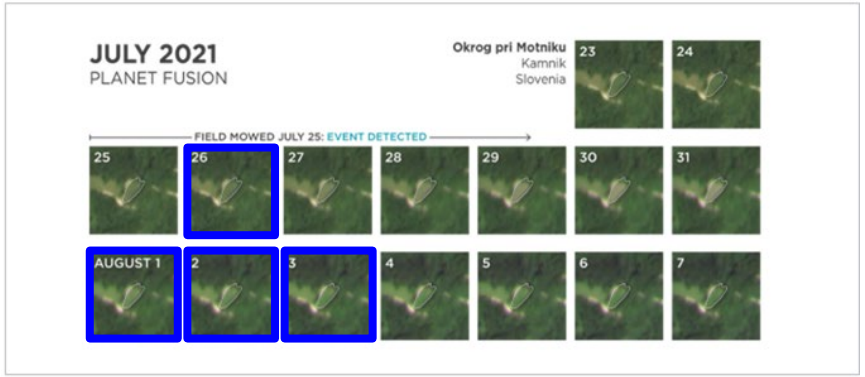


Complementary use of PlanetScope and Sentinel-2 data

AG Monitoring of relevant events

Sentinel-2 is the preferred data source for large area AG monitoring. Temporal resolution pose a challenge for bi-weekly Sentinel-2 cadence.

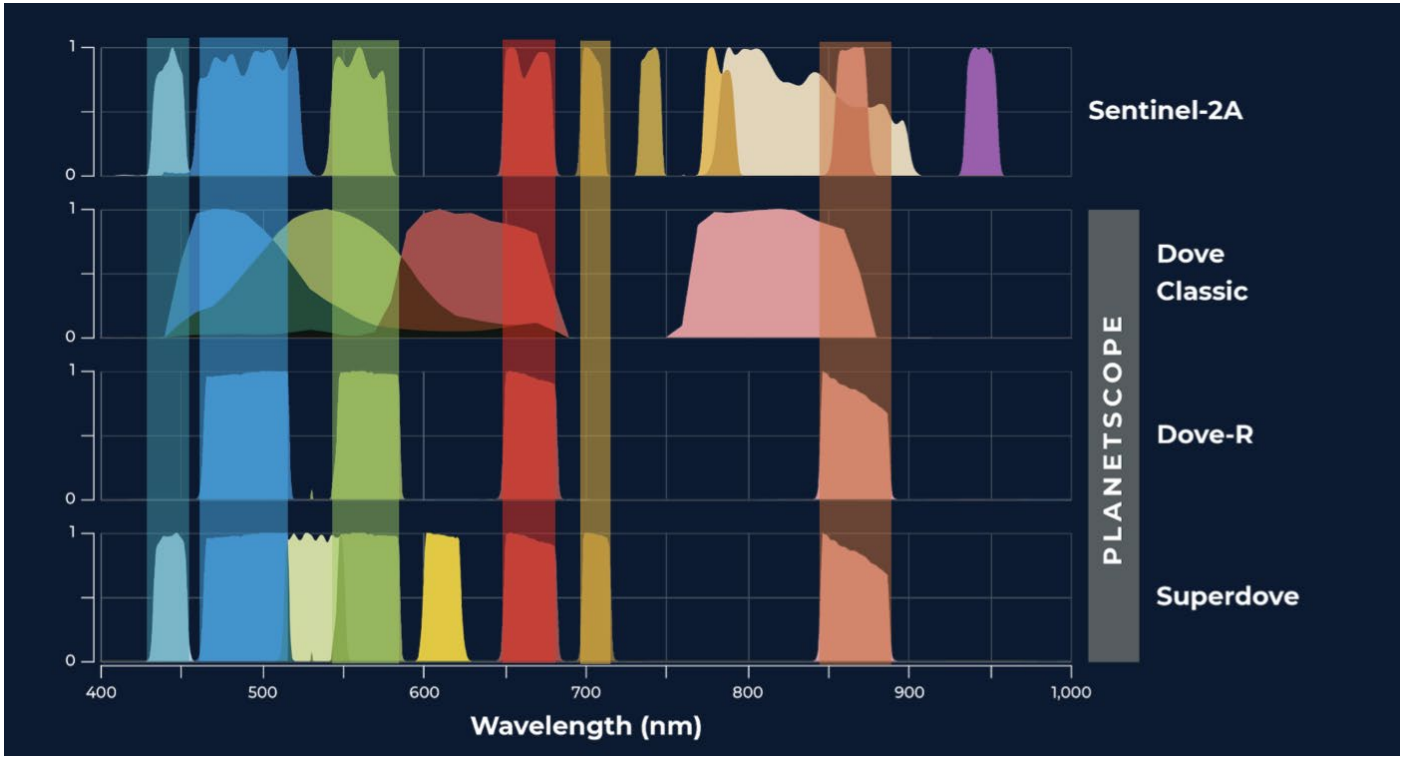


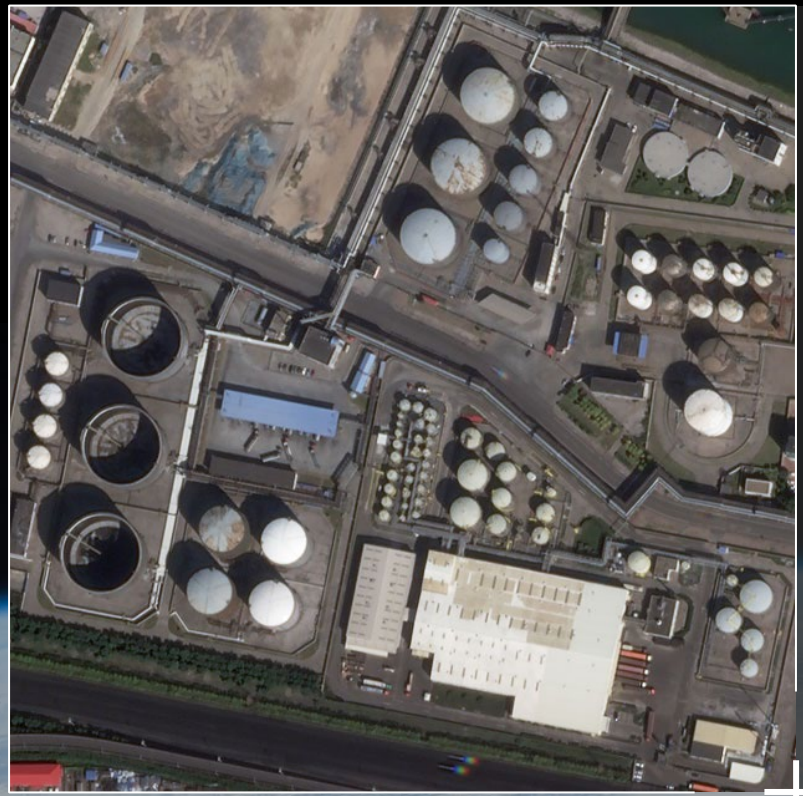


PlanetScope source image available

Complementary use of PlanetScope and Sentinel-2 data

PlanetScope and Sentinel-2 data are spectrally compliant





SkySat

SATELLITES	GSD	CAPACITY
21	**0.65 m**	**600 K km²**/day

ORBIT ALTITUDE	SPECTRAL BANDS
450 km	**RGB, PAN** and **NIR**

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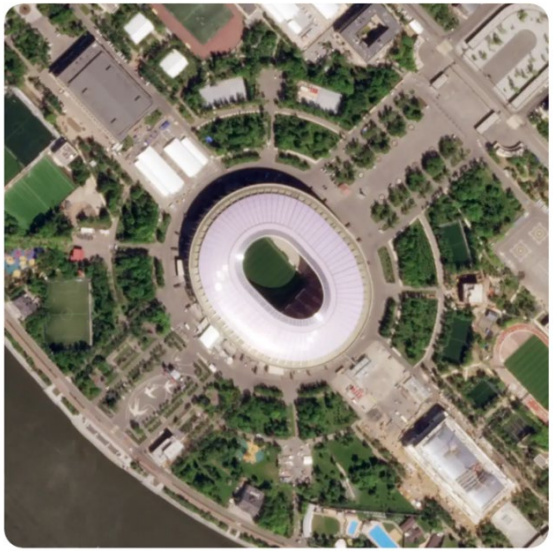
SkySat products available for Copernicus Services



Standard Collect

Point and strip up to 500 sq km

Video

Pan video up to 120 seconds

Stereo Collection

3D models and DEM construction for volumetric analysis

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High Revisit SkySat Tasking Example

Monday Sep 23, 2019

4 SkySat collects of the Port of Abu Dhabi

SSC12	06:53 UTC
SSC1	07:32 UTC
SSC8	09:38 UTC
SSC9	09:50 UTC

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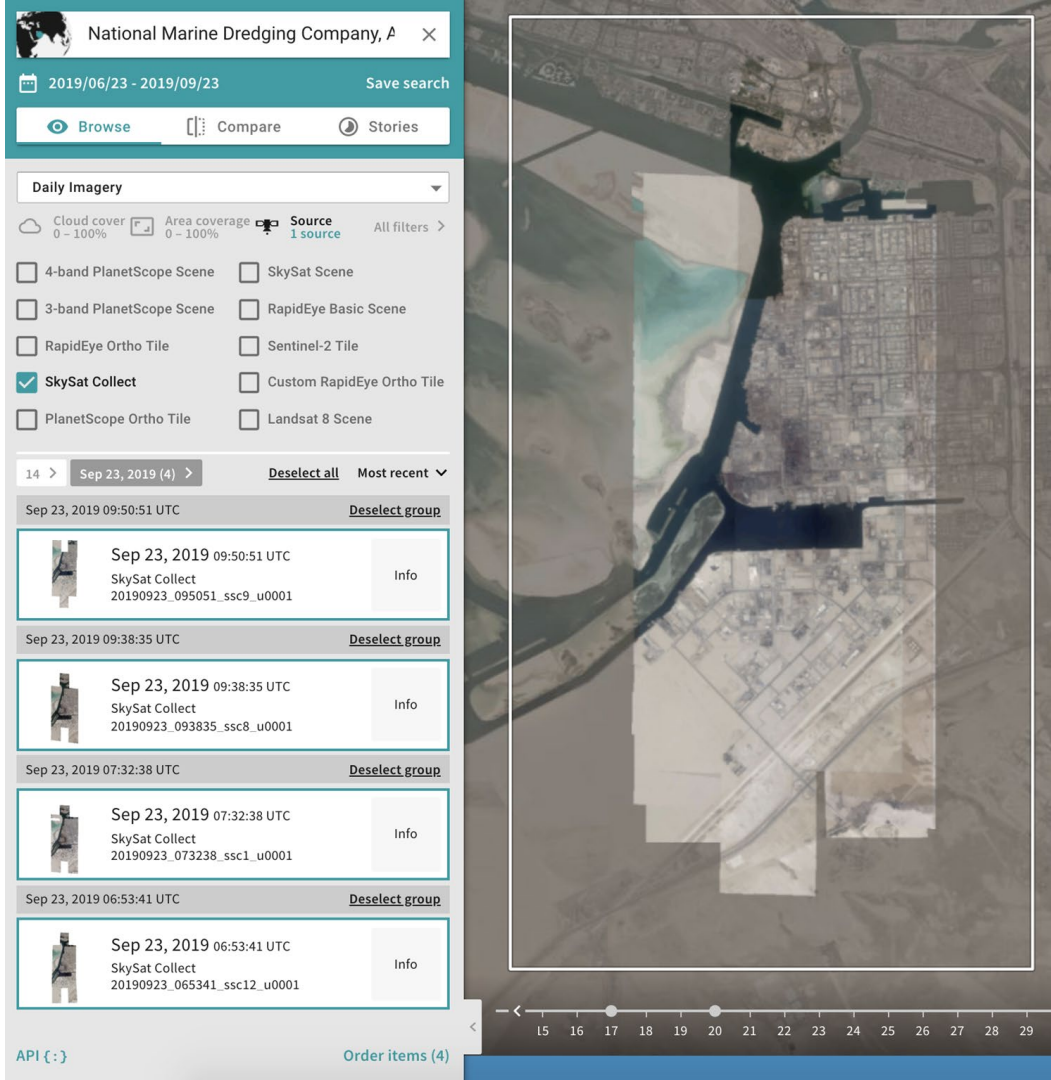


Port of Abu Dhabi
Today, Sep 23
06:53 UTC (10:53 local) SSC12

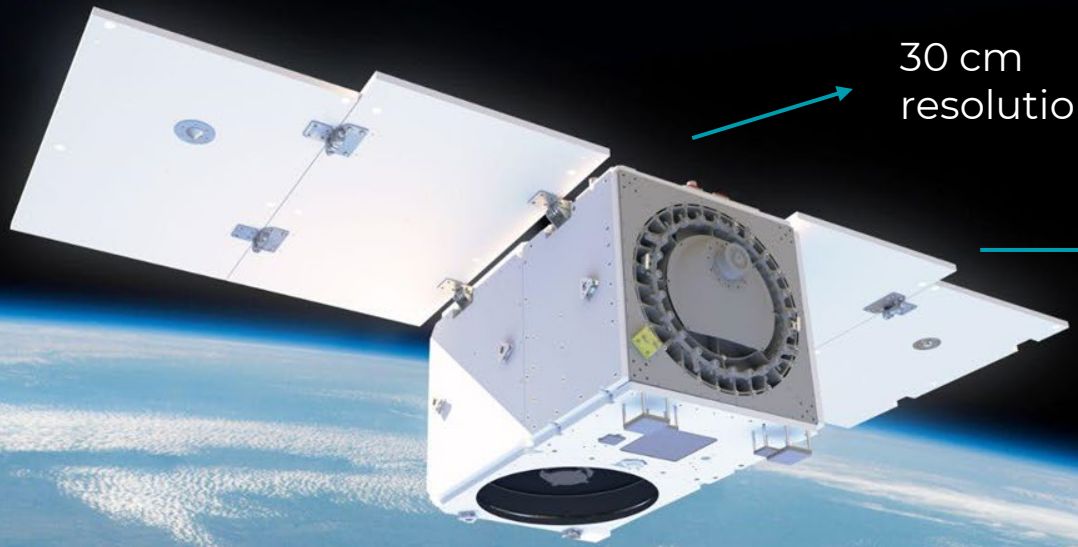
Port of Abu Dhabi
Today, Sep 23
07:32 UTC (11:32 local) SSC1

Port of Abu Dhabi
Today, Sep 23
09:38 UTC (13:38 local) SSC8

Port of Abu Dhabi
Today, Sep 23
09:50 UTC (13:50 local) SSC9

Coming next...

Meet Pelican - next-generation VHR satellite constellation for rapid revisit insights anywhere on the globe.



Acquisition within 5 min or less

30 cm resolution

Up to 30 captures per day

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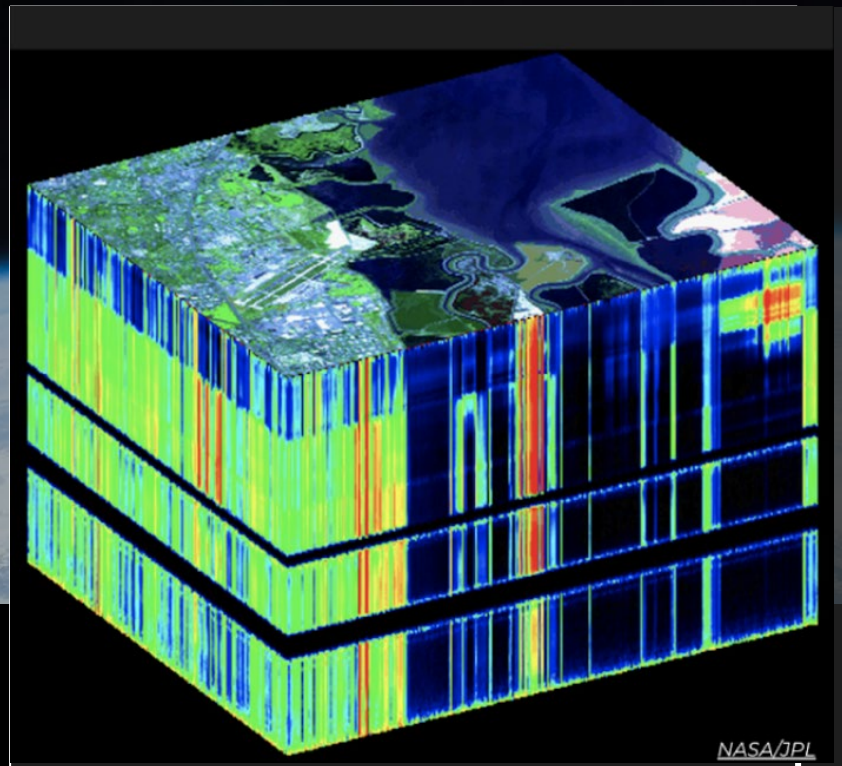
Act for the future.

Meet Carbon Mapper

hyperspectral mission to detect carbon and methane emissions



Carbon Mapper

GSD	CAPACITY
30 m	**93k - 315k km²**/day/satellite

ORBIT ALTITUDE	SPECTRAL BANDS
400 km	**400-2500 nm @ 5 nm spacing**

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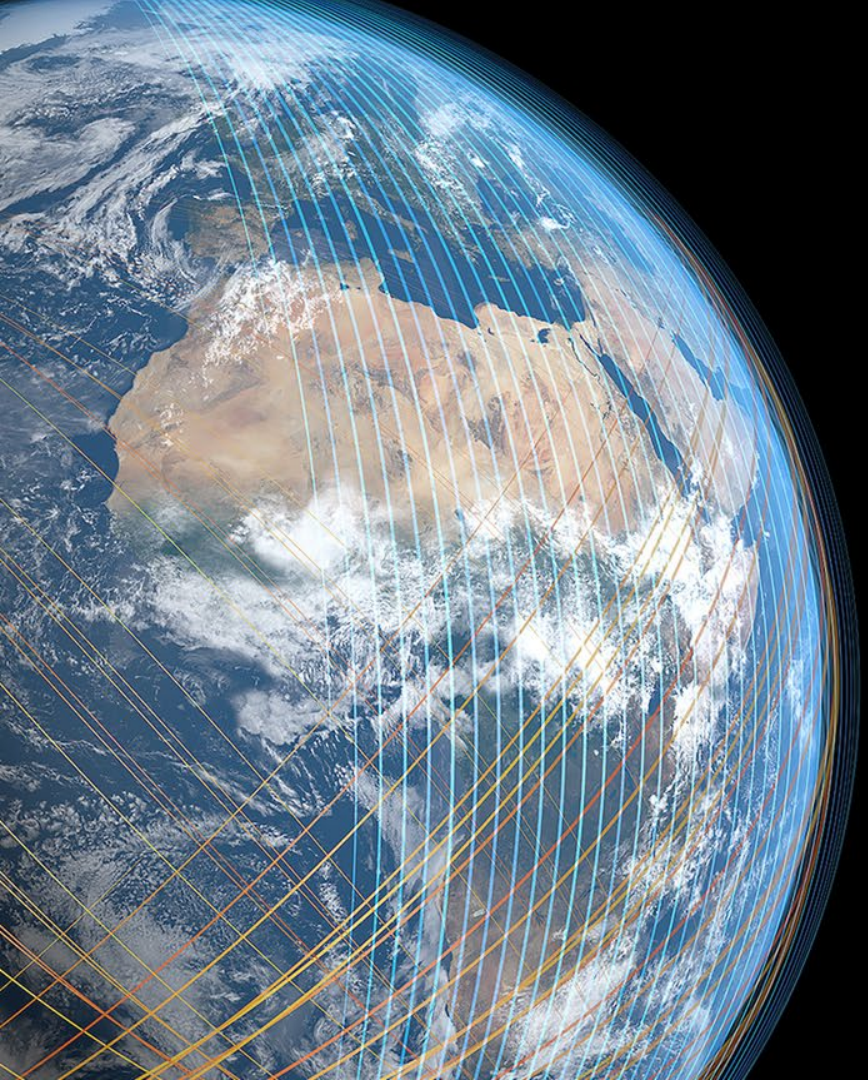

Thank You.

Engage with Planet's Science Programs and apply here for Planet Data via ESA Earthnet
go.planet.com/lps22

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