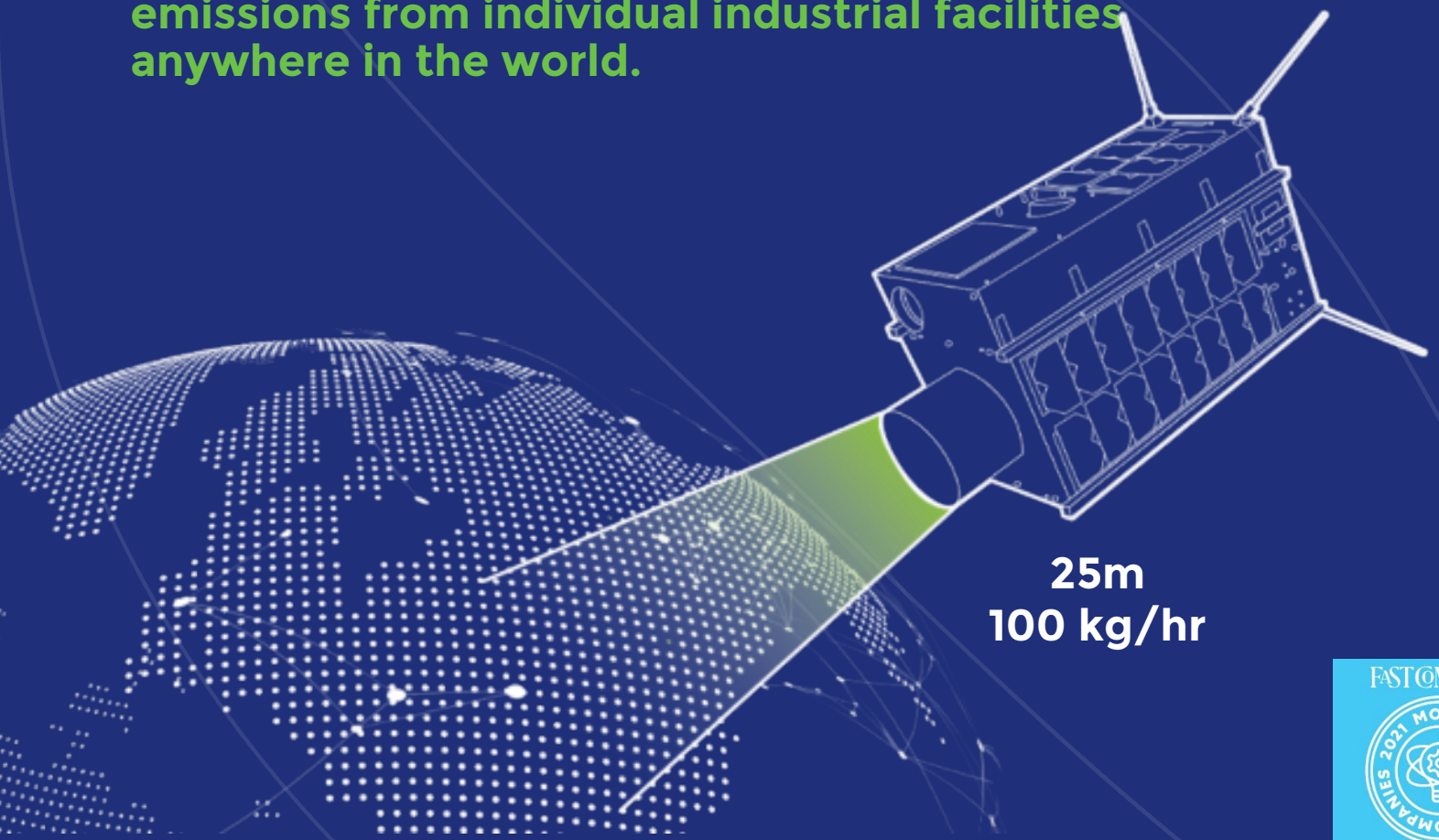
GLOBAL LEADERSHIP METHANE SATELLITE MONITORING

Coal Joint Technical Session: Data Needs for Project Development, Carbon Markets and Policy

GHGSAT™

ROUTINE MONITORING OF METHANE EMISSIONS AT INDUSTRIAL SITES – FROM SPACE

GHGSat is the only entity in the world (private or public) with satellites designed to monitor emissions from individual industrial facilities anywhere in the world.



25m
100 kg/hr

GHGSAT

- Satellite Data
- Aircraft Data
- Analytics
- Data Repository

FAST COMPANY 2021 MOST INNOVATIVE COMPANIES 2021 Honoree

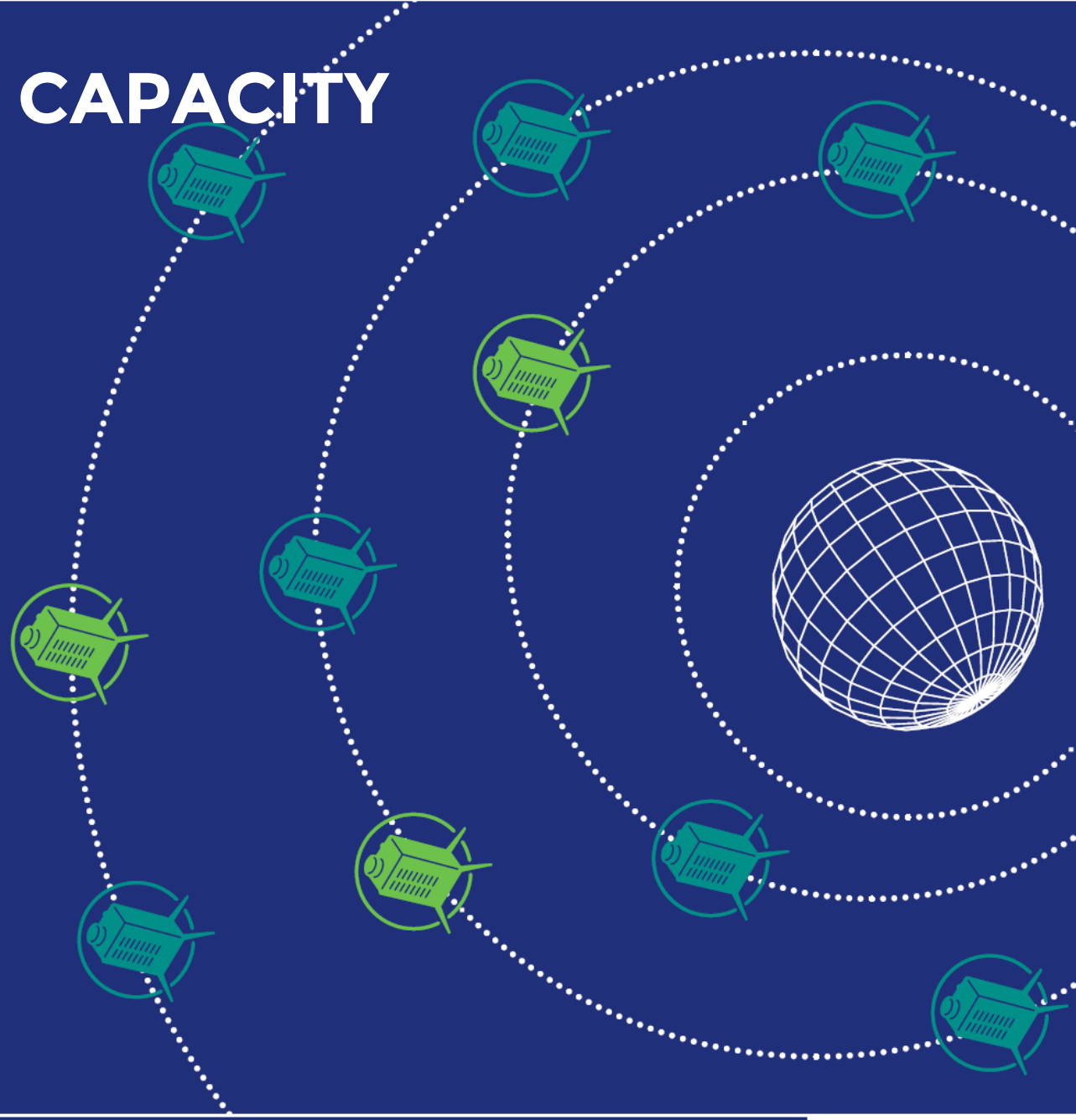
FAST COMPANY Most Innovative Companies 2022

Cleantech Group 2022 - 2023 GLOBALCLEANTECH100

GHGSAT CONSTELLATION – CAPACITY

	Now	Q4 2024	2027+
Satellites in orbit	12	16	100
Facility Measurements per Year	3M+	4M+	20M+

Every industrial emitter in the world, measured daily, in near real-time



GHGSAT™

METHANE DETECTIONS FROM GHGSAT SATELLITES

Total methane emissions detected in 2023

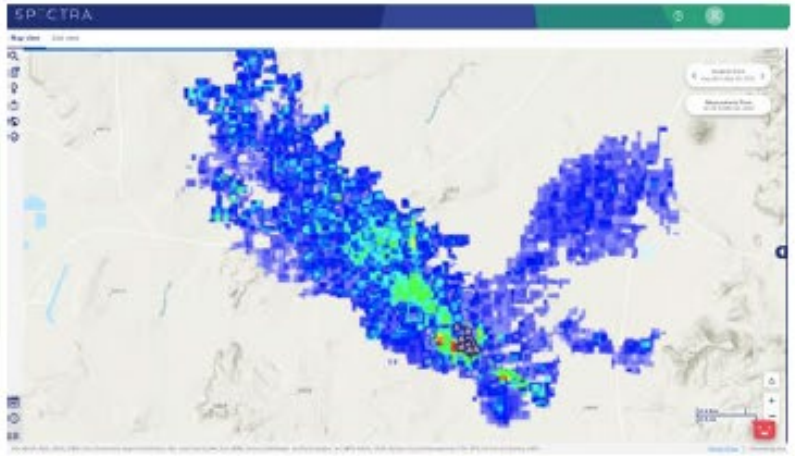
361

MTCO₂e

200%

Increase on 2022

Where in the world would there be 17 detections from the same site in 6 months?



Oil & Gas	48%
Coal	22%
Landfill	28%
Other	2%

Proportion of 2023 emissions detected

>3 M km²

Our satellites monitored > 3 million km² in 2023, 300% more than in 2022

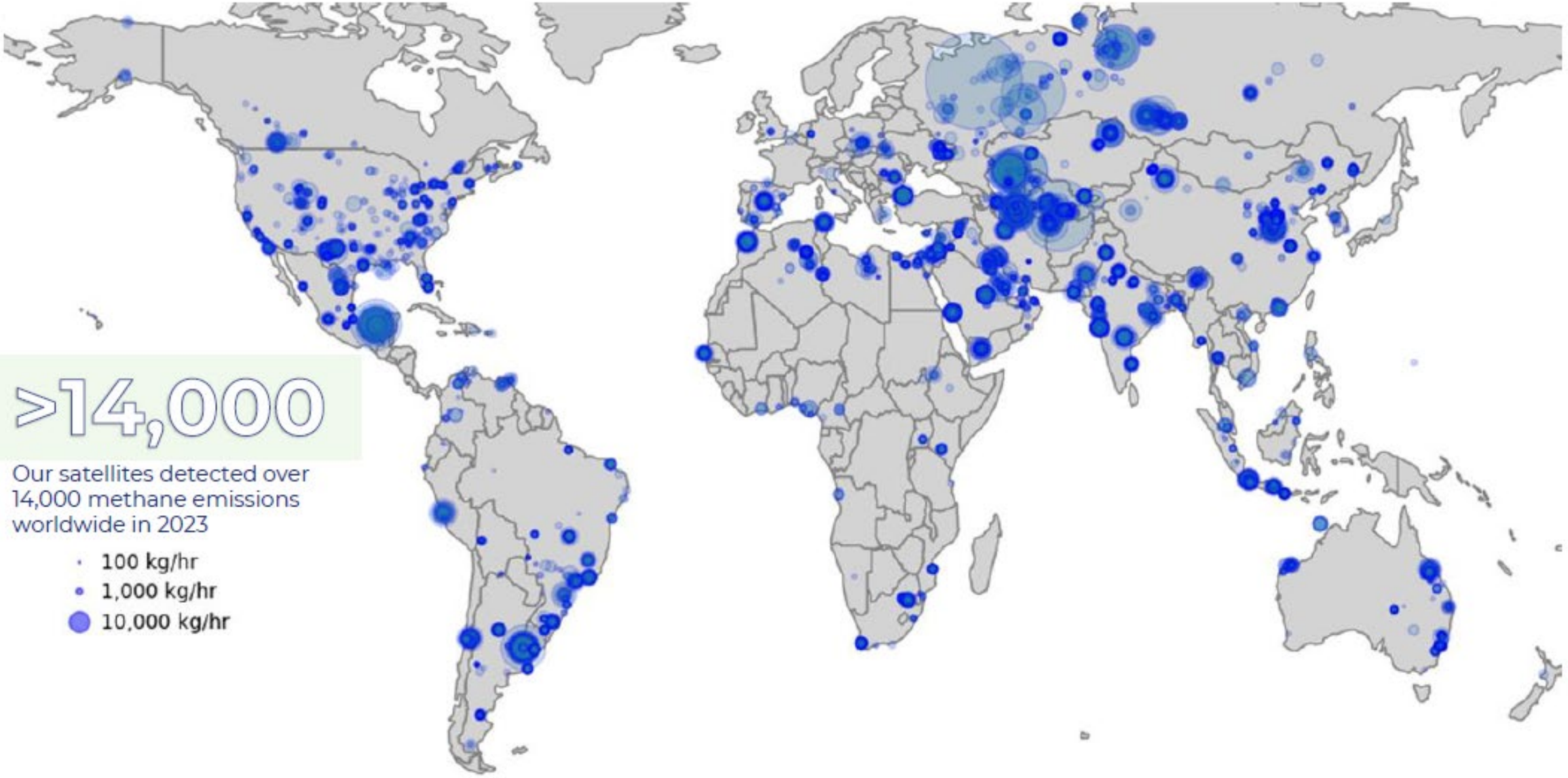
>3 M measurements

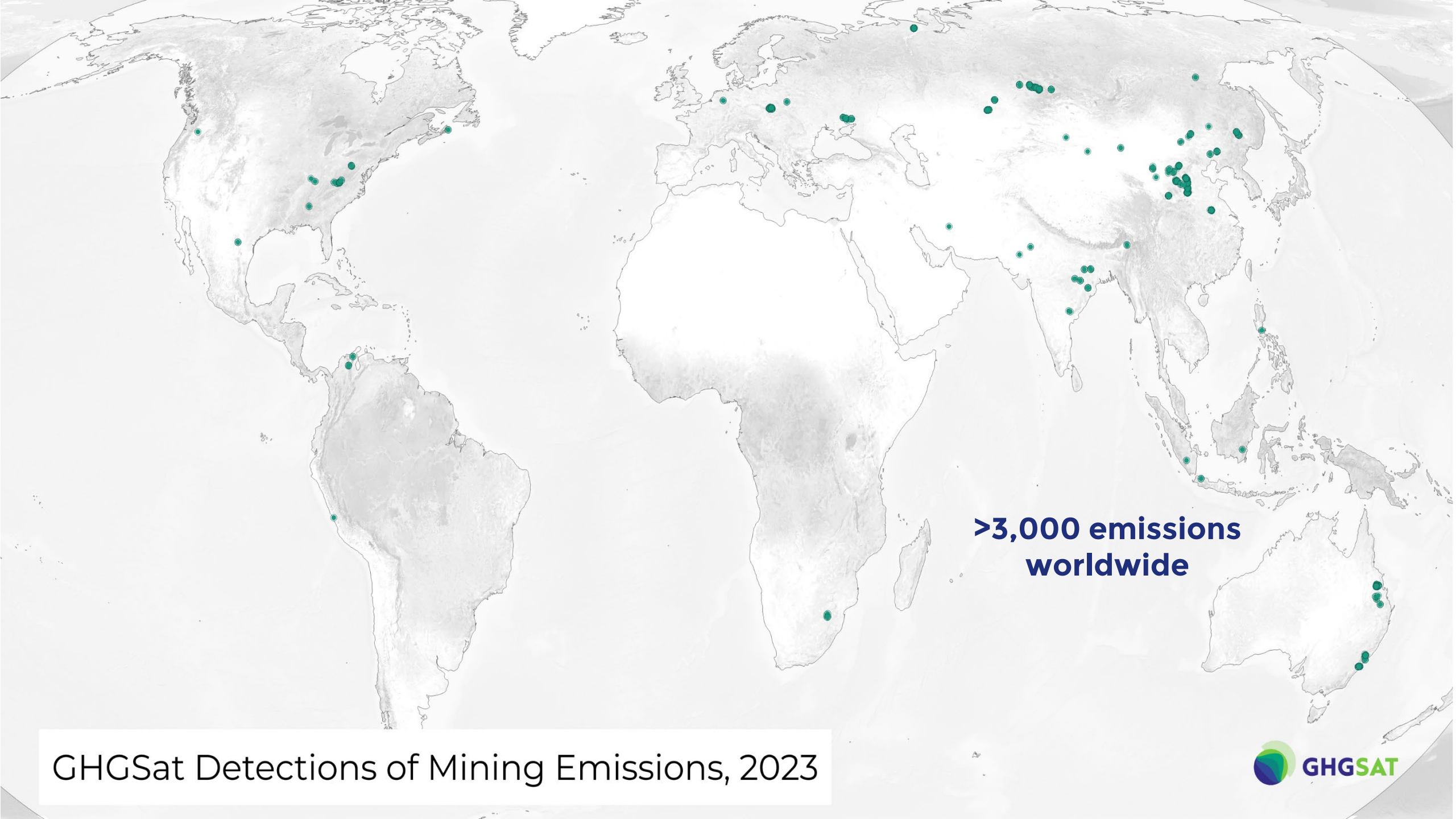
Our satellites performed > 3 million facility measurements worldwide in 2023

69 countries

Our satellites monitored facilities in 69 countries, on all continents worldwide

METHANE DETECTIONS FROM GHGSAT SATELLITES





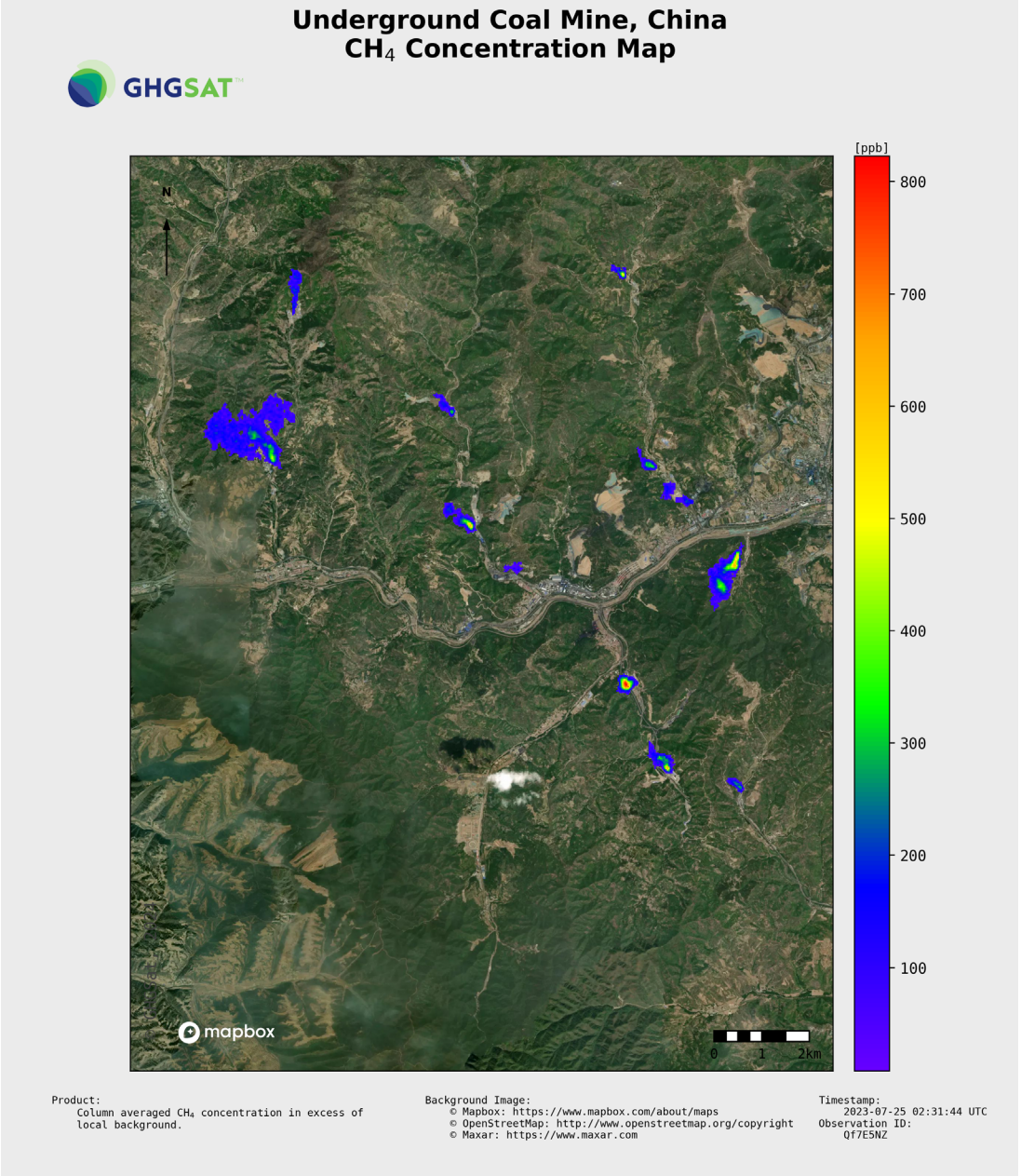
GHGSat Detections of Mining Emissions, 2023

GHGSAT

UNDERGROUND COAL MINE

China – 12 emissions

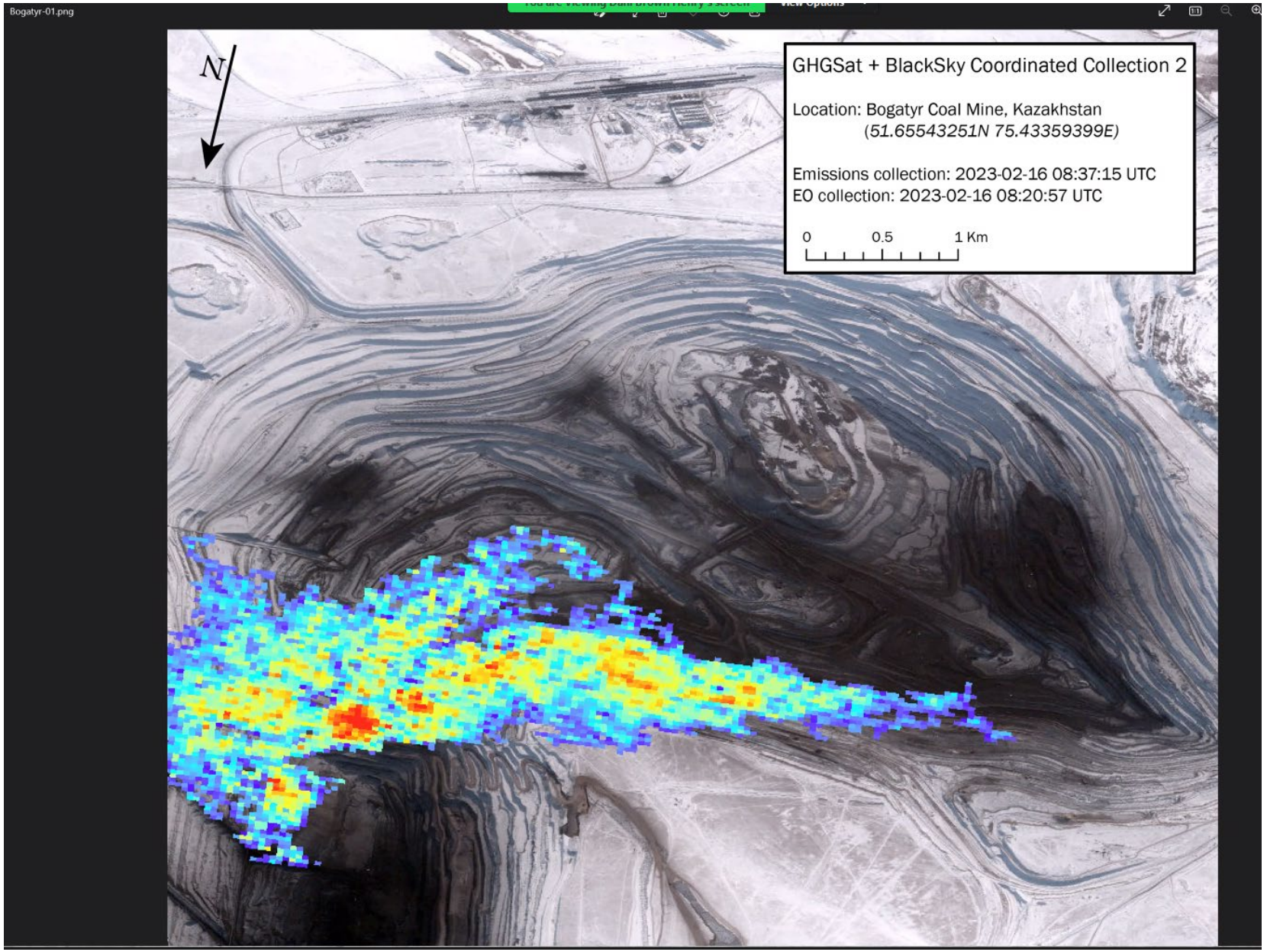
July 2023 - Total 10,615 kg/hr across 12 vents



OPEN PIT COAL MINE

Kazakhstan mine

4,864 kg/hr +/- 47%

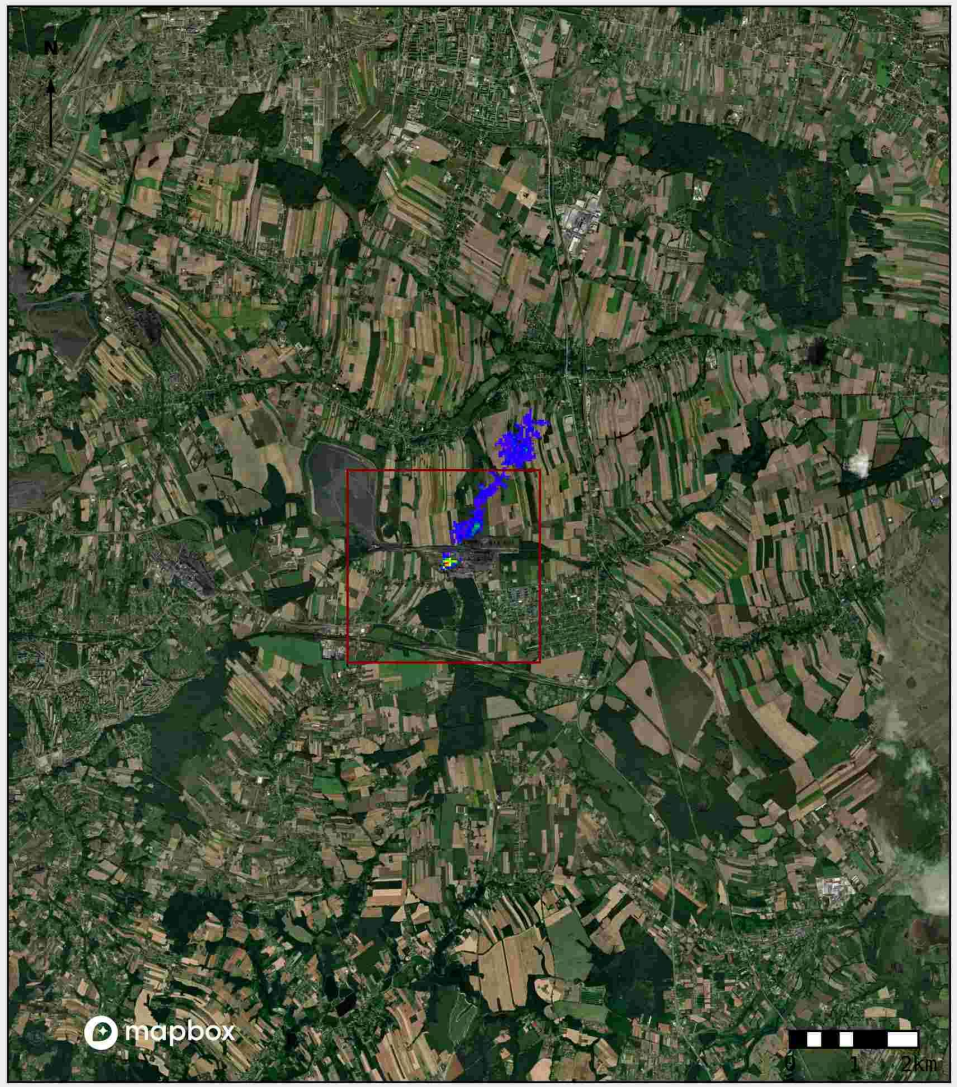


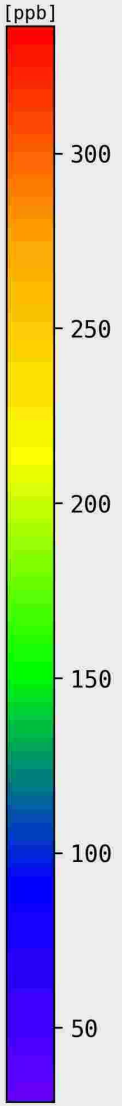
POLAND

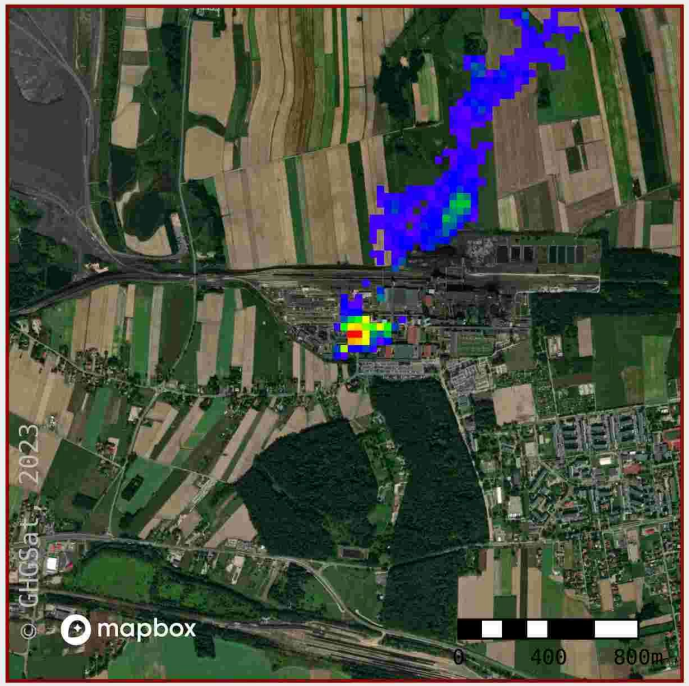
October 18, 2023

Pniówek Shaft III

1,022 kg/hr +/- 54%







Product:
Column averaged CH_4 concentration in excess of local background.
Background Image:
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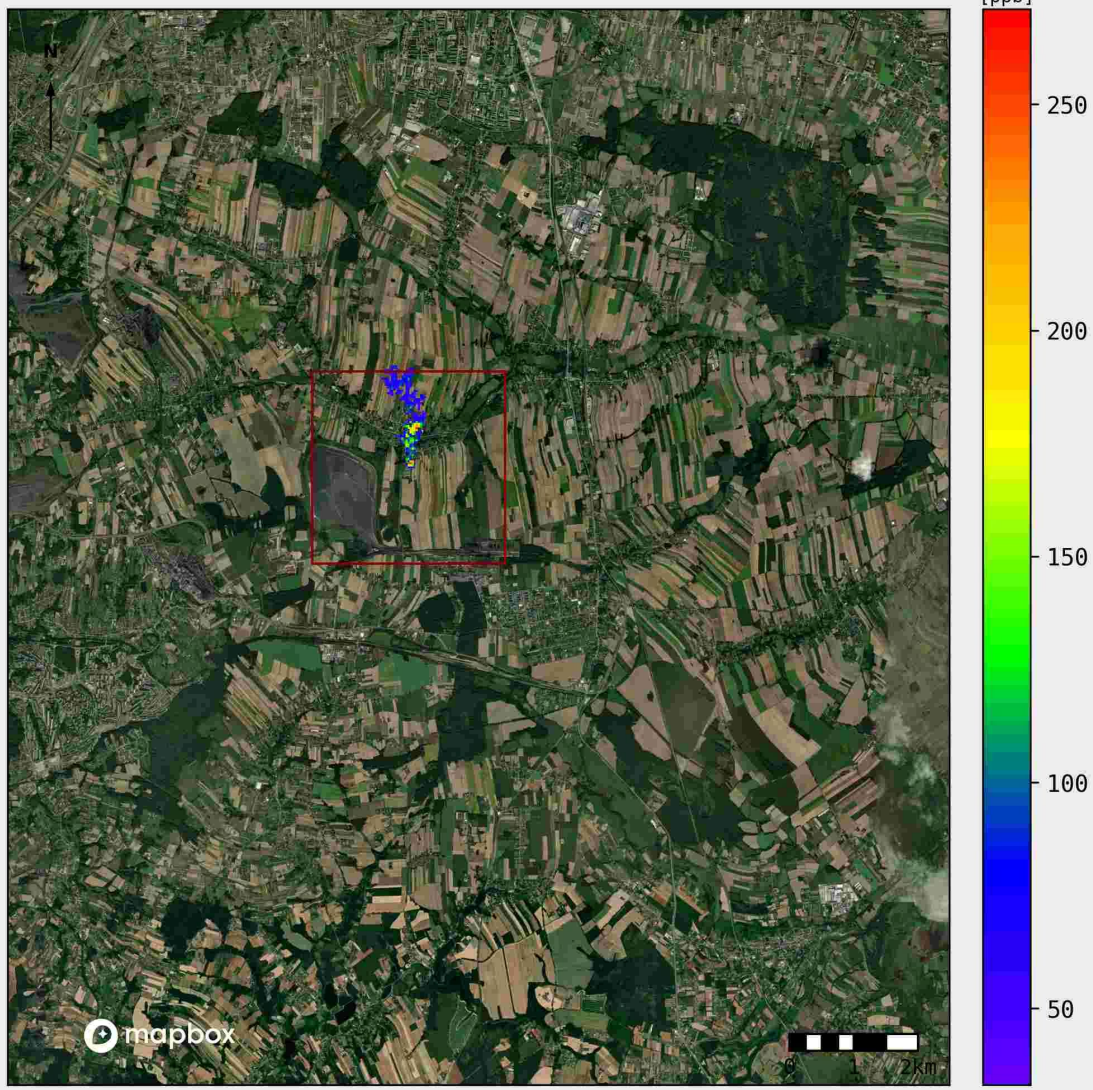
Timestamp:
2023-10-18 12:35:58 UTC
Observation ID:
EgU7YR9
Satellite:
GHGSat-C3

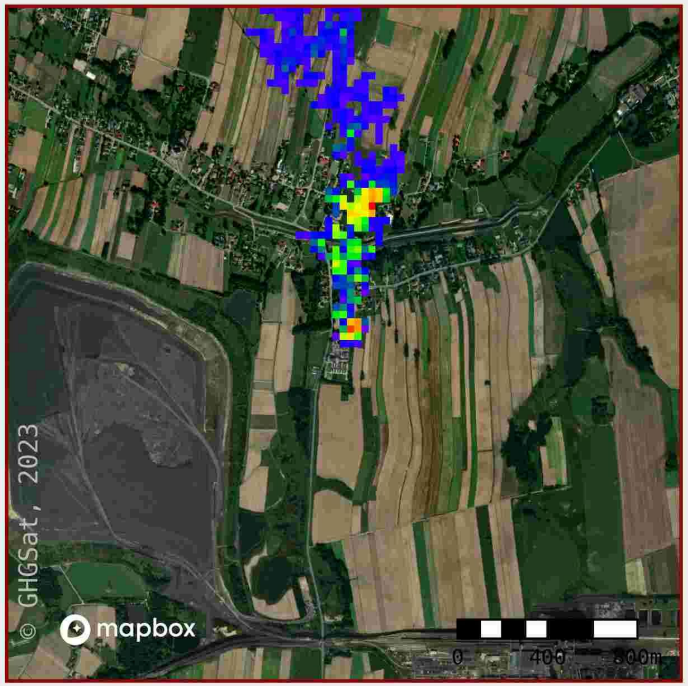
POLAND

October 18, 2023

Pniówek Shaft IV

904 kg/hr +/- 54%





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Observation ID:
EgU7YR9
Satellite:
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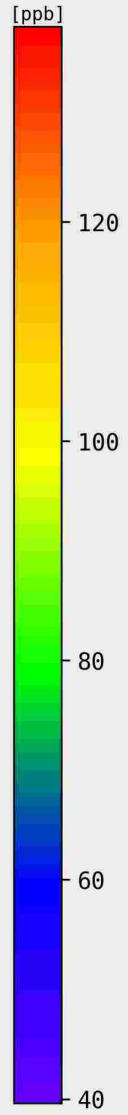
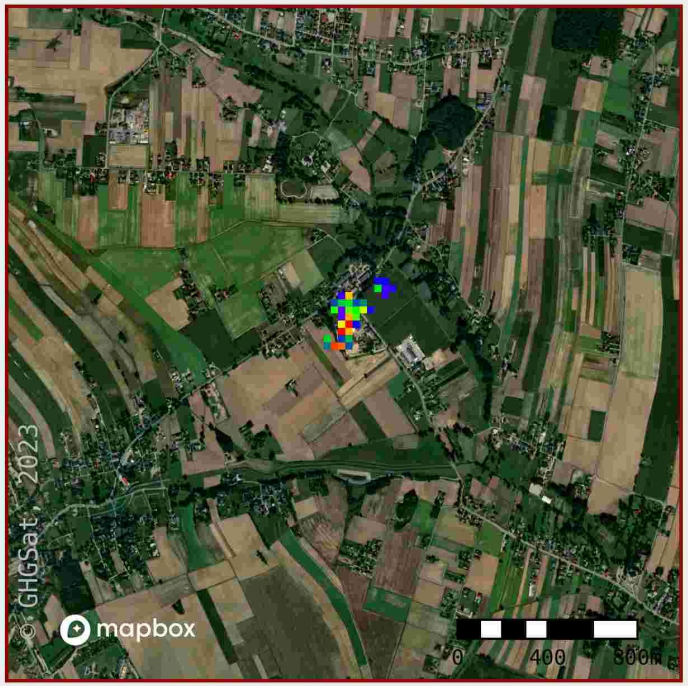
POLAND

October 18, 2023

Borynia Shaft VI

250 kg/hr +/- 54%





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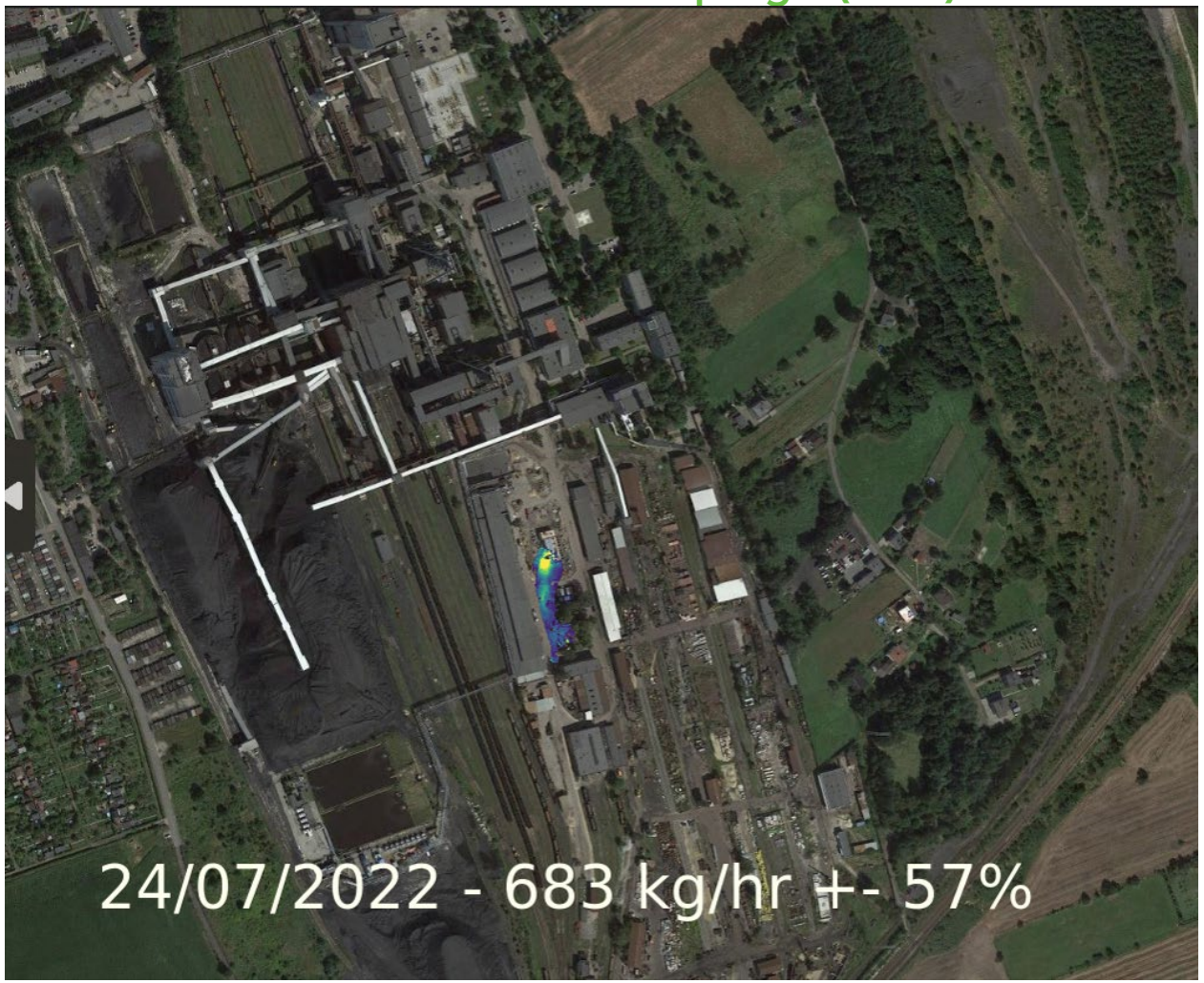
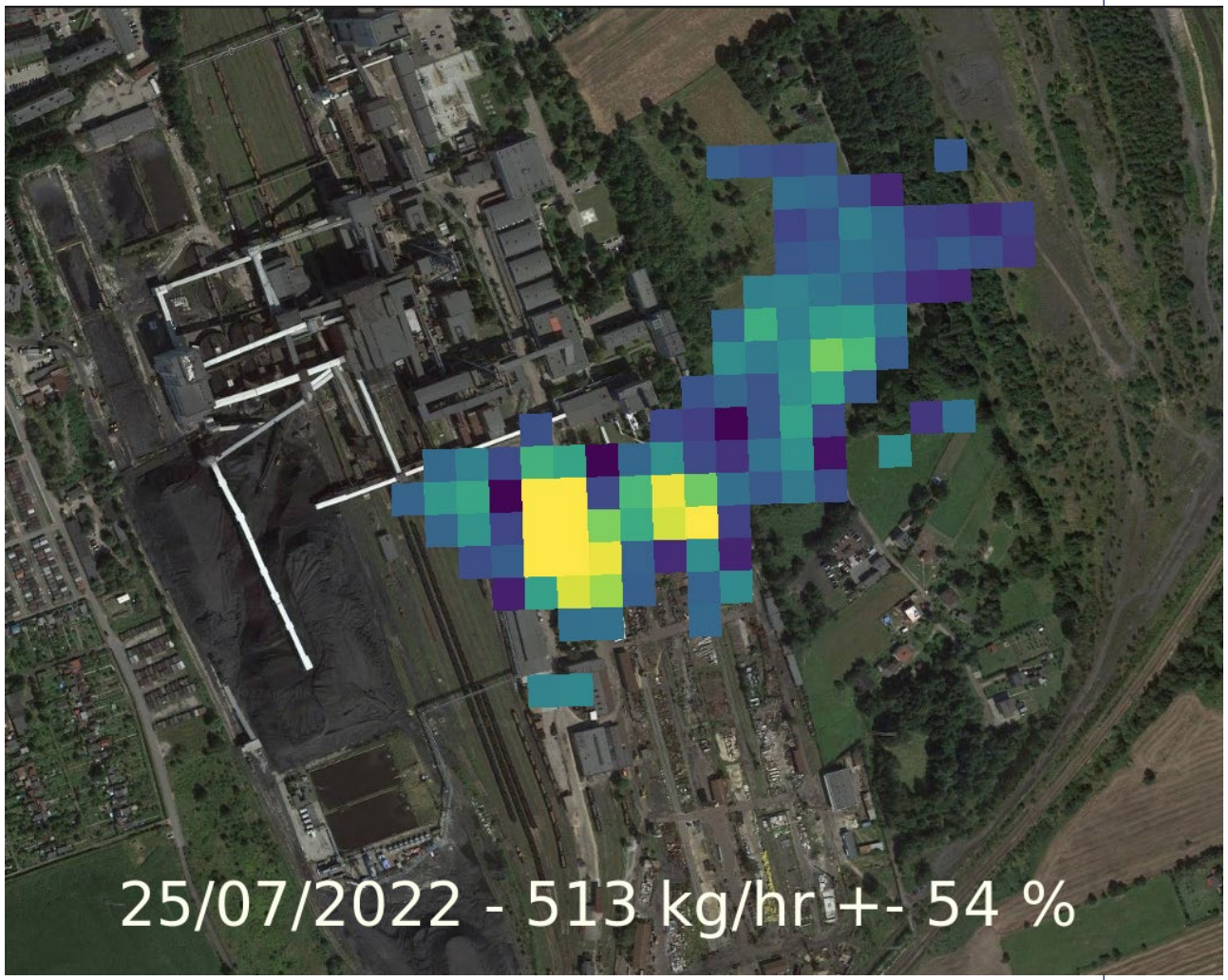
POLAND

Satellite and AV Joint Campaign (ESA) – Knurów mine





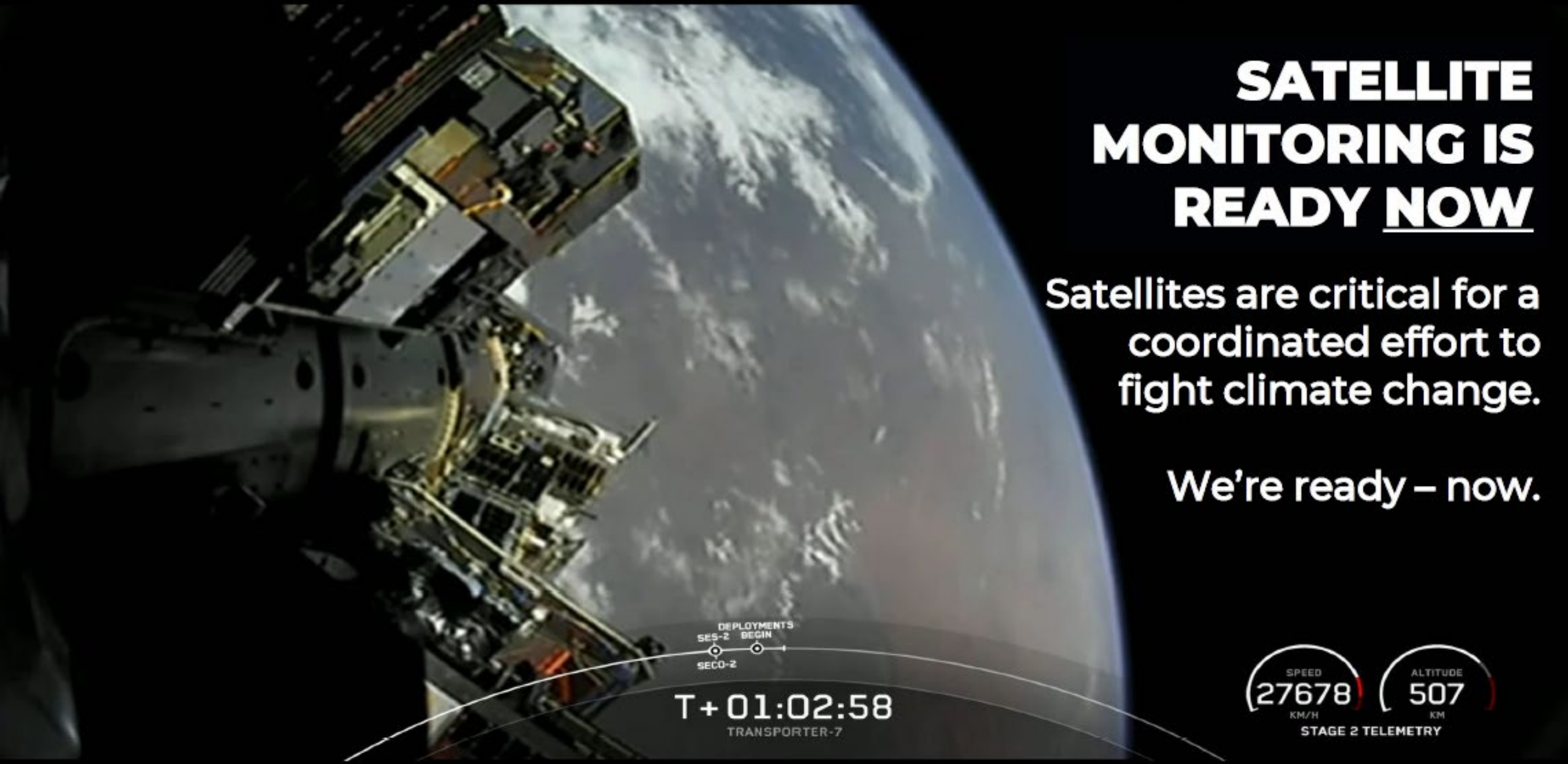
TAKEAWAYS

A Few Key Things to Remember

- Satellite data is available now to provide insight on magnitude of emissions, which shafts are emitting and when, also yielding clues on mine activities

- The Data can be cross-validated with other measurement methods (aircraft, drones, ground measurement to increase accuracy and minimize error

- The information can be used in conjunction with other sources of data to help develop a plan for action and inform policy-making



SATELLITE MONITORING IS READY NOW

Satellites are critical for a coordinated effort to fight climate change.

We're ready – now.