Methane Alert and Response System

Manfredi Caltagirone

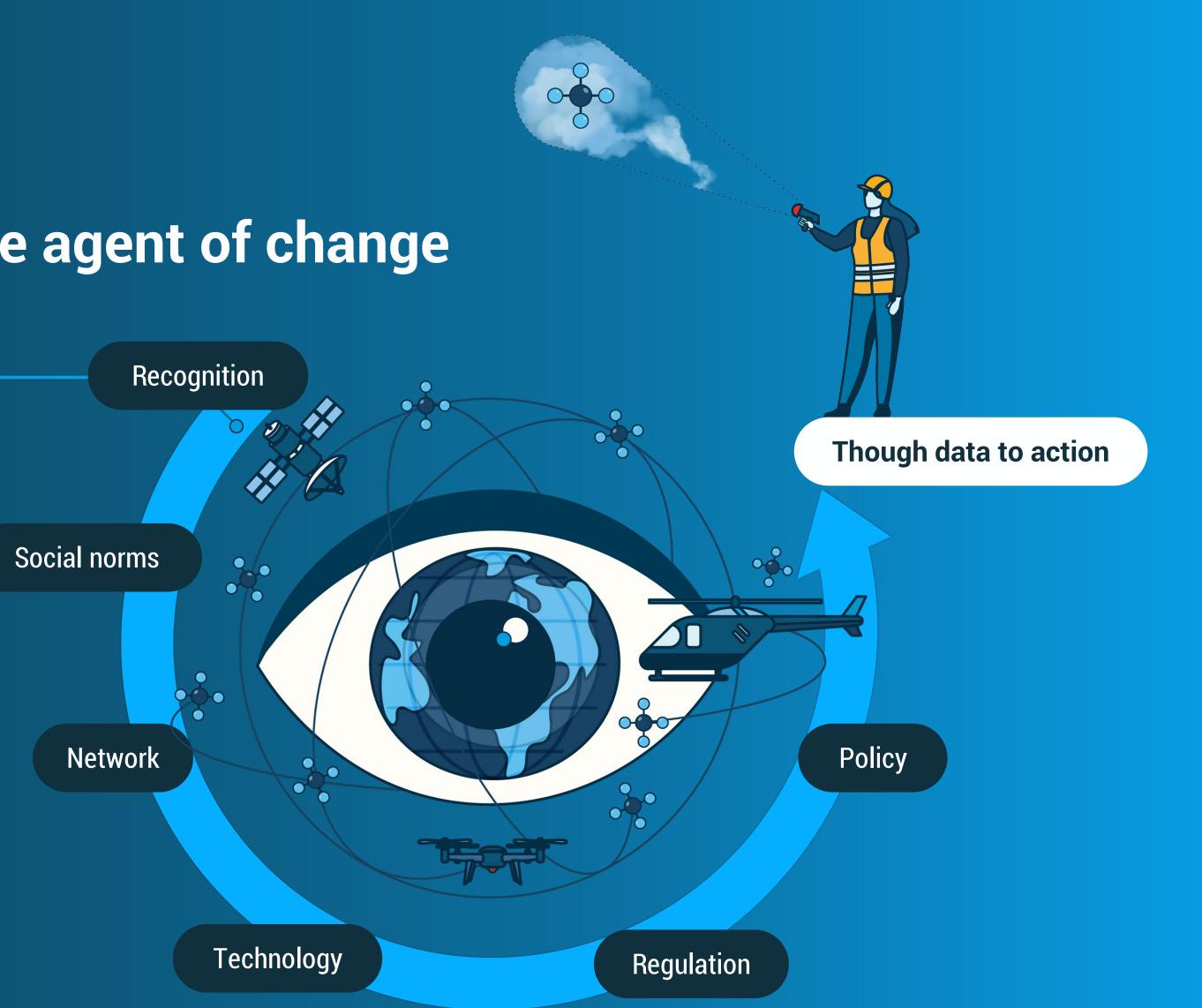
March 2023





UNEP's IMEO: data centered around the agent of change

The International Methane Emissions Observatory exists to provide open, reliable, and actionable data to those that can act to reduce methane emissions

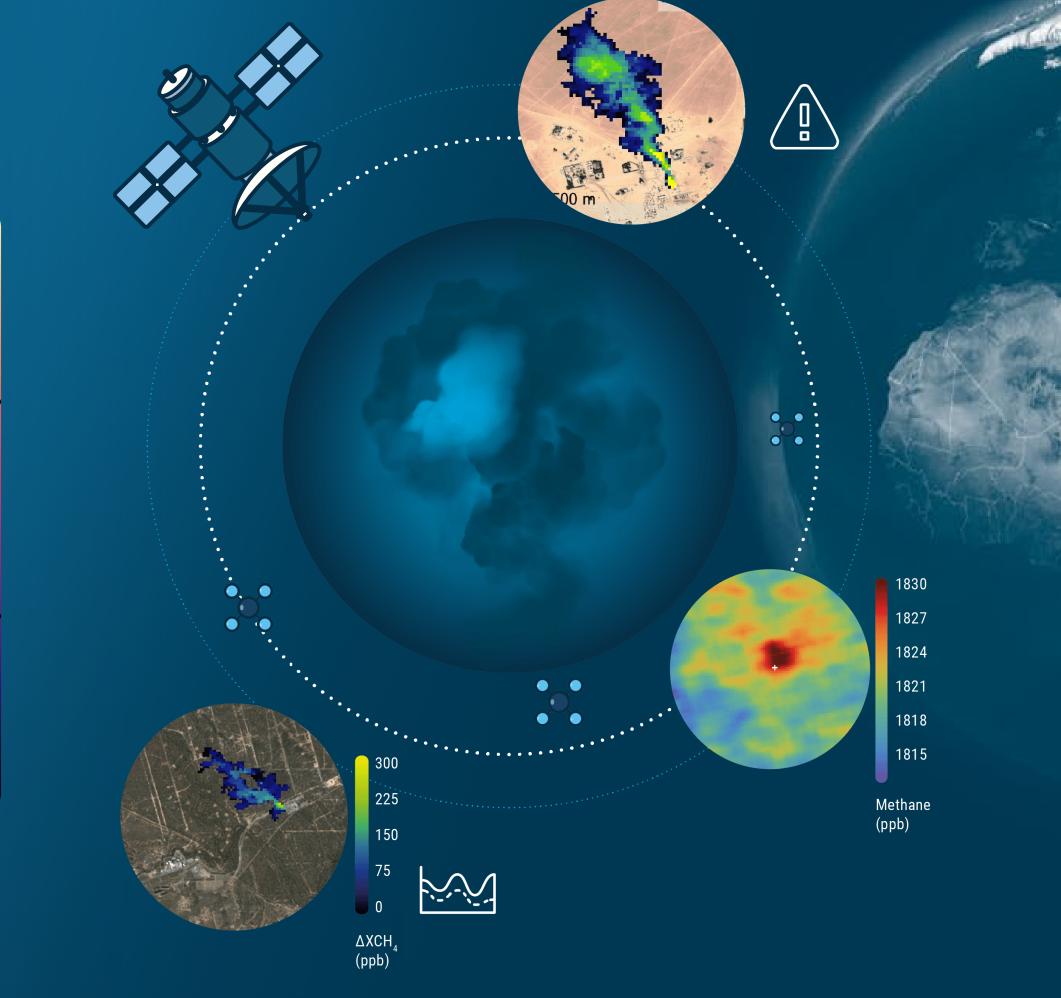




IMEO's MARS uses satellites to provide open, reliable and actionable data to stakeholders

Component 1 →	Detect and Attribute
Component 2	Notify and Engage Stakeholders
Component 3	Stakeholders Take Action
Component 4	Track, Learn, Collaborate, Improve









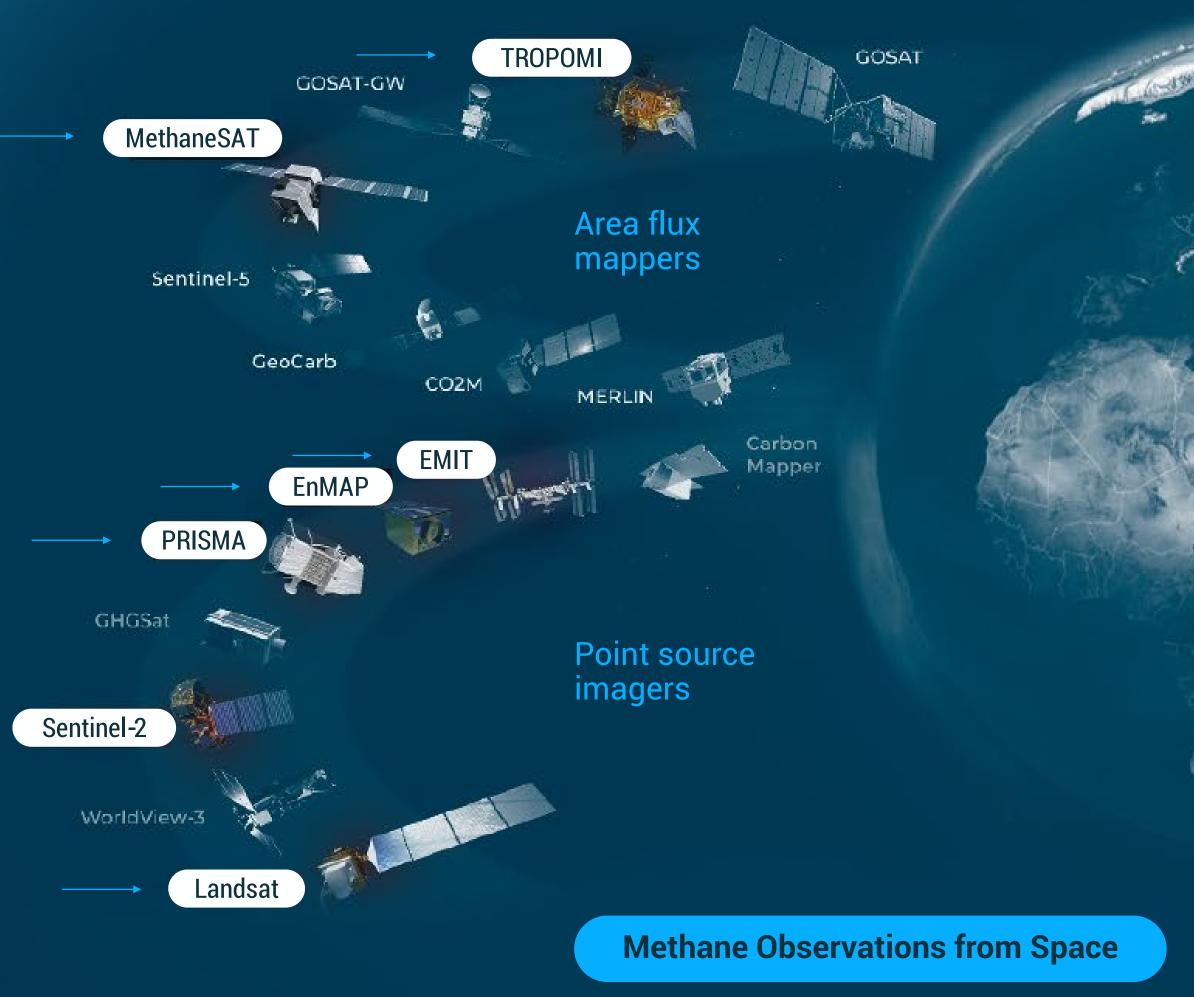
Component 1: MARS uses state-of-the-art, publicly available satellite data to drive notification and mitigation processes

Global mapping satellites are used to identify very large methane plumes and methane hot spots

Further analysis using other satellites and datasets enables attribution











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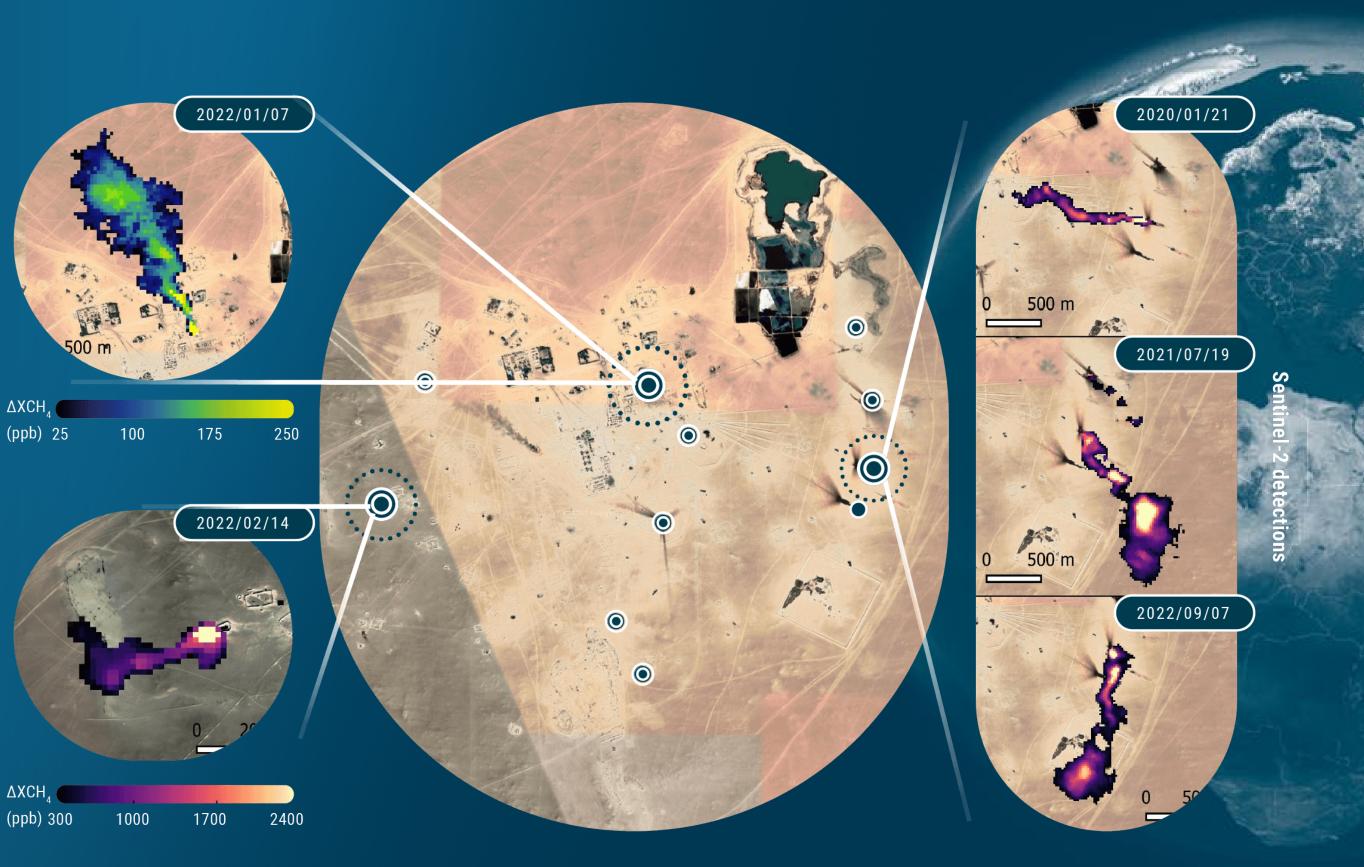
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Component 2: MARS notification process (Initial and Full)



Initial Notification

1-3 days after detection of the plume



Maximum 2 weeks after detection



Initial notification on the event is communicated



Additional analysis provided with a request to share next steps





Governments and MARSparticipating OGMP 2.0 companies notified simultaneously If non-OGMP 2.0, government then companies

Governments and companies notified simultaneously



Preliminary notice + feedback

- 1-2 days for acknowledgment
- 5 days for initial feedback



Mitigation and Tracking

After 45-75 days, all non-proprietary data and metadata is made publicly available





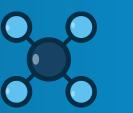
MARS improves global transparency on methane emissions

MARS supports IMEO's objective to provide open, reliable, actionable methane emissions data globally.

Active participation in MARS enables stakeholders to demonstrate leadership on methane emissions and a commitment to best-in-class operations.

IMEO-gathered satellite data and related metadata (e.g., visual data)





MARS Data Publication Policy

After 45-75 days, MARS data will become publicly available, including:

Summary of company and/or country response(s) to notification process

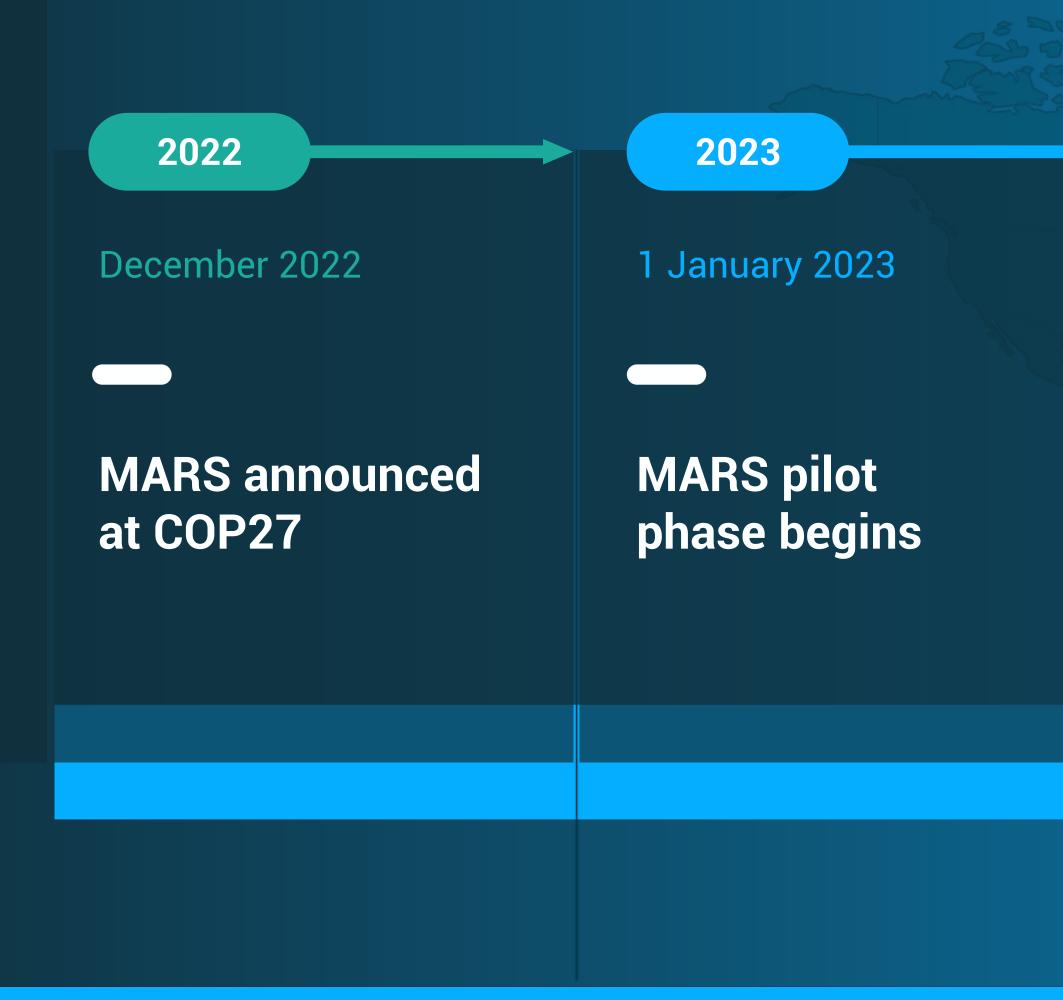
Summary description of mitigation efforts and/or plans

Any future MARS detections linked to the event location









Second half of 2023

Public launch of MARS

Incorporation of new data streams and sources

2024 and on







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