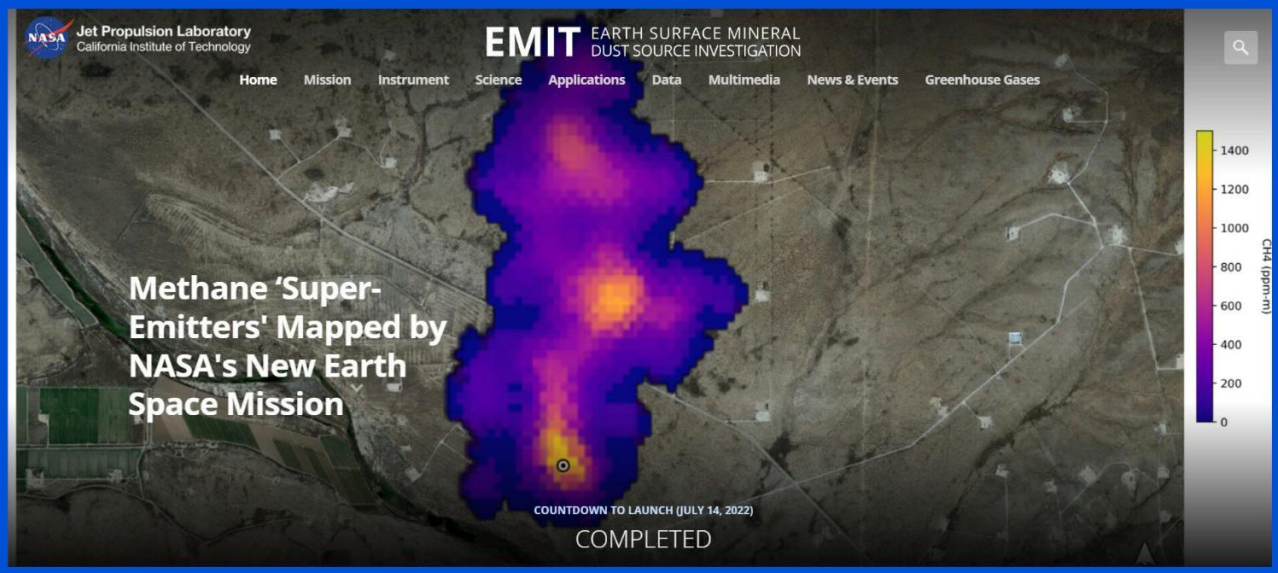
NASA INTERNATIONAL SPACE APPS CHALLENGE

How to Use EMIT the ISS Space Camera to protect the World

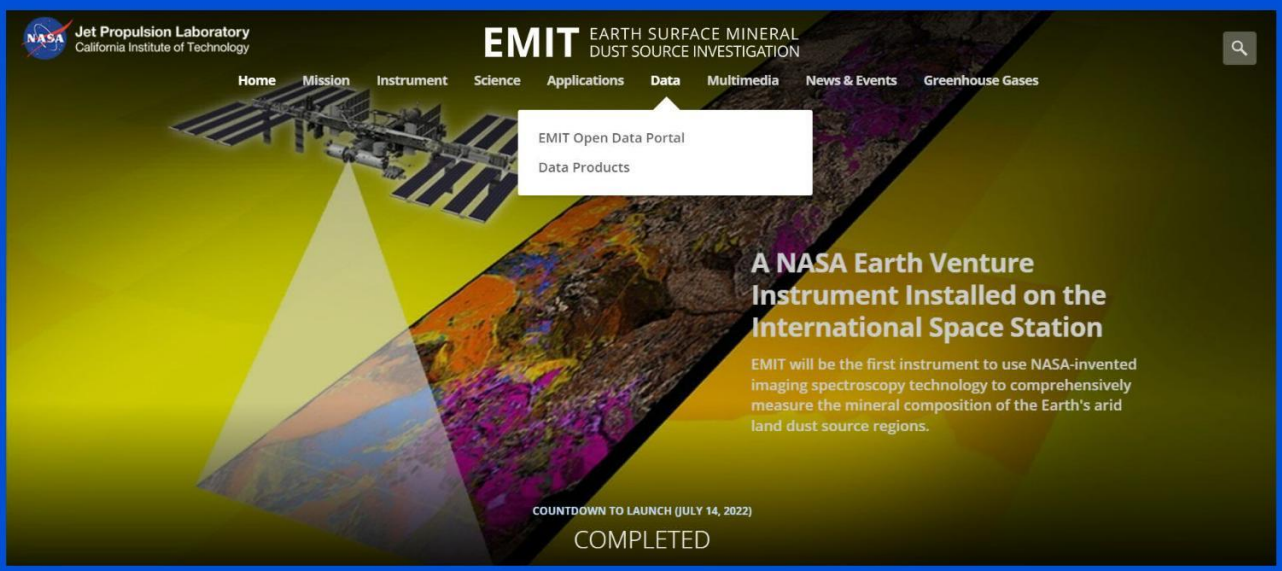
OFFICIAL SCHOOL LAB

The Earth Surface Mineral Dust Source Investigation (EMIT) is an Earth Ventures-Instrument (EVI-4) Mission to map the mineral composition of arid dust source regions via imaging spectroscopy in the visible and short-wave infrared range. EMIT generated images are easily viewable on the site https://earth.jpl.nasa.gov/emit/ Using EMIT data you can be able even to track greenhouses gasses, their size and where they came from.

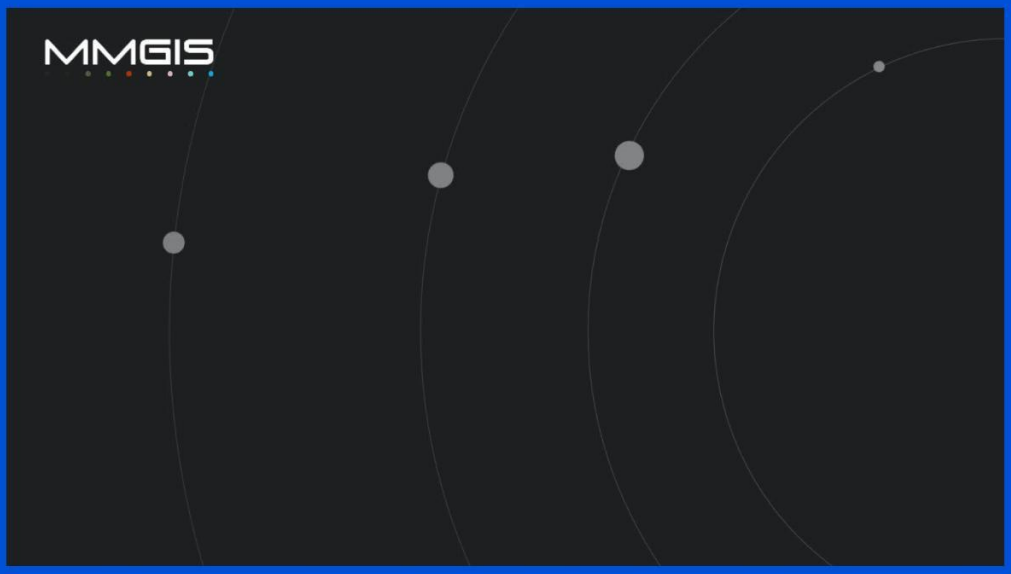
1) Search **EMIT** site, it will show up like this:



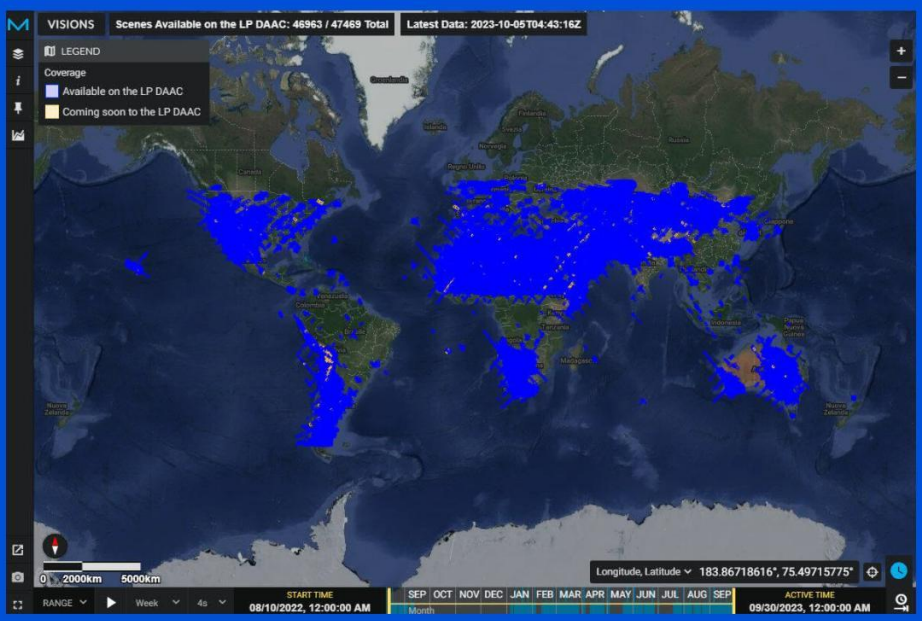
2) Place your mouse on Data and click on EMIT Open Data Portal:



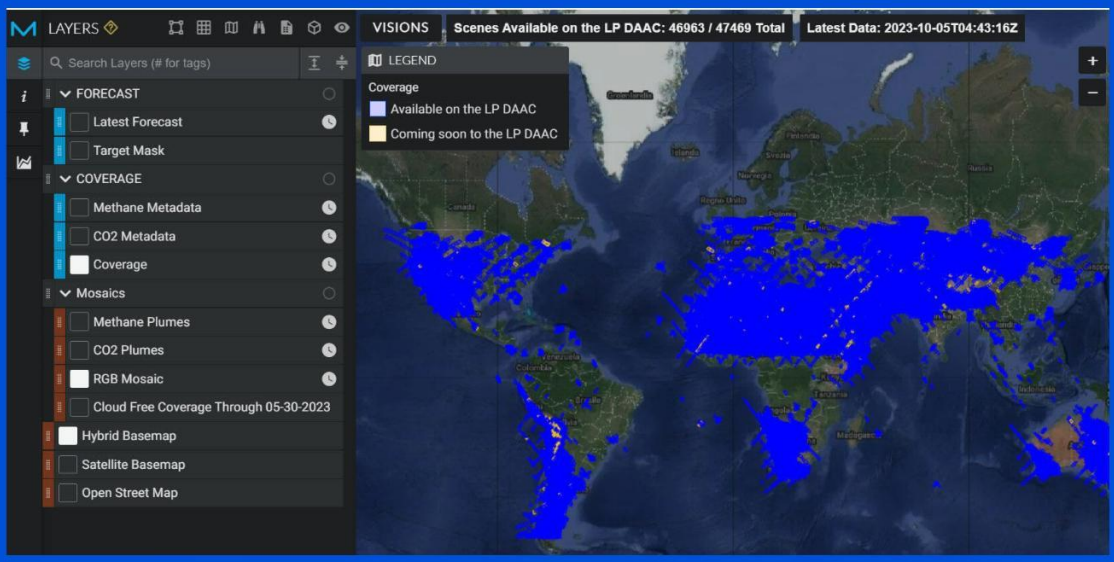
3) Wait the loading screen:



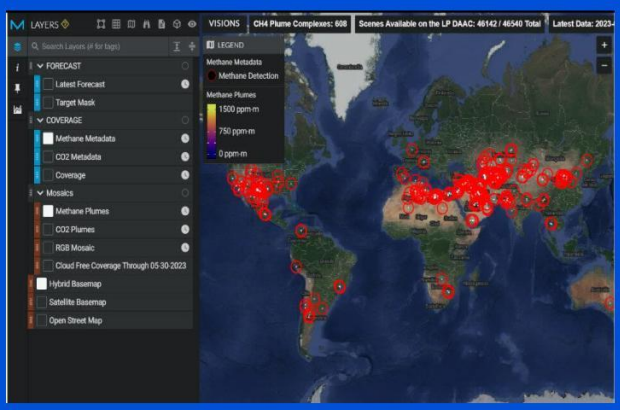
When it is loaded, you are going to see Earth map:



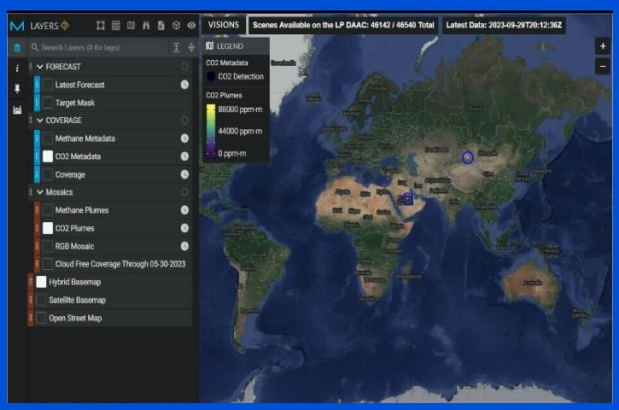
4) Click on Layers, those options will show up:



5) Uncheck Coverage and RGB Mosaic.
In order to see unusual methane (CH4) emissions, check Methane Metadata and Methane Plumes.
In order to see unusual carbon dioxide (CO2) emissions, check CO2 Metadata and CO2 Plumes.
Circles show where those emissions are located.

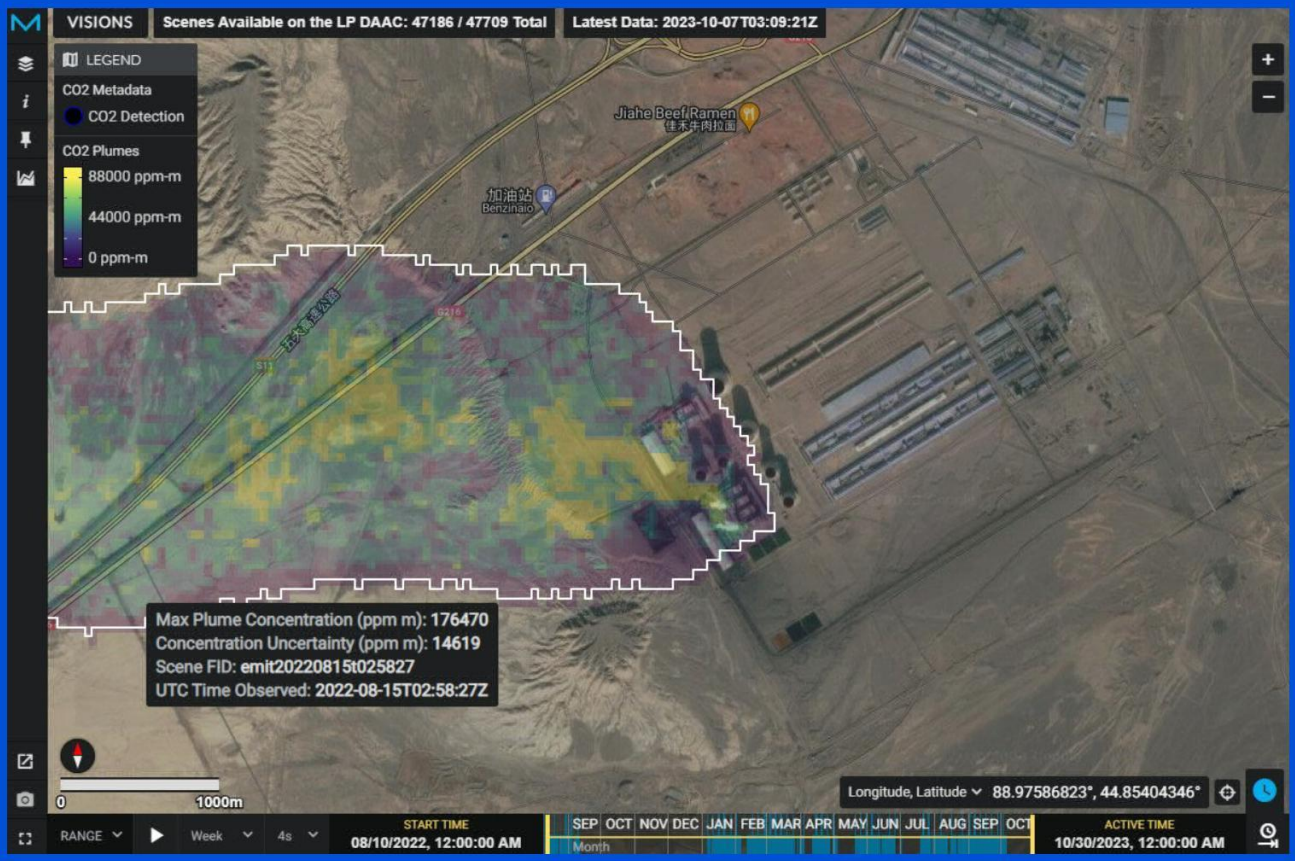


METHANE

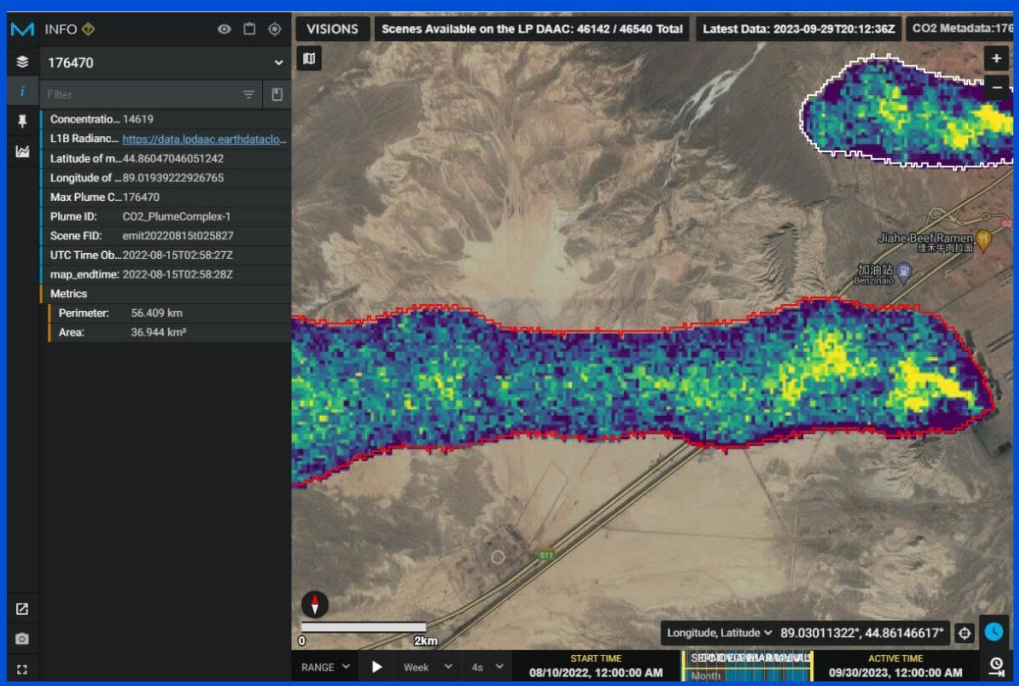


CO2

6) Zoom to see where those area are found, for example where CO2 is located, and if you place your mouse on the cloud you will see its concentration and when it has been seen:



7) Click on the “cloud” and then click on info, you will see the emission details: position, concentration and its size.
For example, this one is as big as **5000 football fields!**



We are EMIT-Visions ISS Copilot TEAM and our goal is to raise awareness about greenhouses gasses and how to use the NASA open-source resources to investigate them.

www.emit-vision-iss-copilot.com

contact us isscopilot@gmail.com