

AMOS signs a new contract with OIP Sensor Systems to monitor CO₂ in our atmosphere

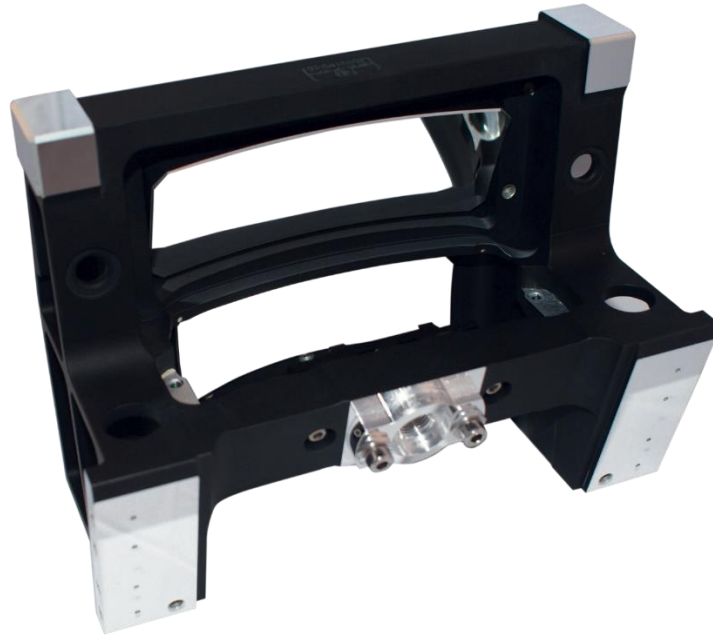
AMOS signed a new contract with OIP Sensor Systems for the delivery of the telescope of the Cloud Imager, one of the instruments to be embarked on the new Copernicus CO₂M mission whose goal is to accurately monitor the CO₂ levels in the Earth's atmosphere.

The Copernicus programme, led by the European Commission and implemented by the European Space Agency, aims at deploying a suite of World class satellites to monitor various phenomena and physical parameters across the surface of the Earth. The data collected by these satellites, called "Sentinel", address challenges such as urbanisation, food security, rising sea levels, diminishing polar ice, natural disasters and, of course, climate change.

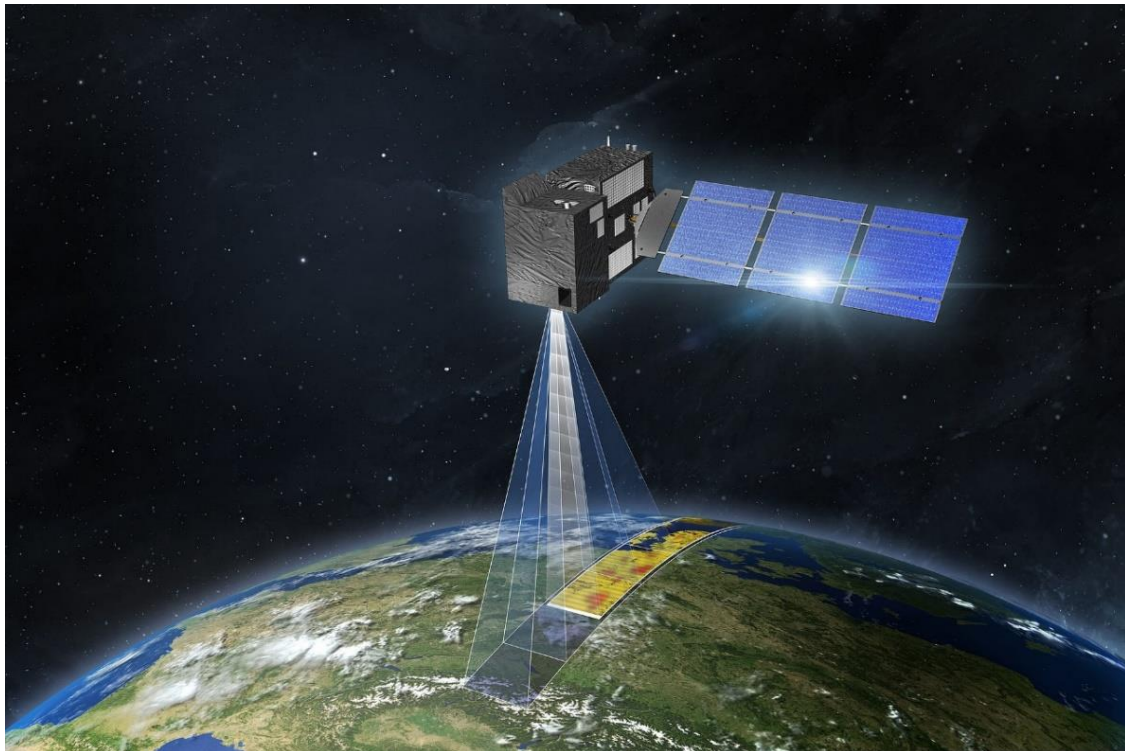
The Anthropogenic Carbon Dioxide Monitoring mission (CO₂M), the first in a series of new high-priority Copernicus missions, will mainly carry a near-infrared and shortwave-infrared spectrometer to measure the atmospheric carbon dioxide produced by human activities. These measurements will reduce current uncertainties in estimates of CO₂ emissions from the combustion of fossil fuels at national and regional scales. This will provide the EU with a unique and independent source of information to assess the impact of policy measures, and to track their effectiveness in decarbonising Europe and meeting emission reduction targets.

OIP was contracted by ESA to supply one of the CO₂M optical instruments, the Cloud Imager, dedicated to the monitoring of cloud coverage. It will map the clouds in Earth's atmosphere in order to help differentiate human-produced CO₂ emissions from those generated by natural processes. AMOS will manufacture the high precision aluminium telescope located at the front of the instrument. Thanks to its sensitivity, it will be able to detect small fractions of optically thick clouds and thin cirrus. Its design is a direct heritage of the PROBA-V instrument launched in 2013 and based mostly on Belgian technology. The success of this instrument convinced ESA to embark an enhanced version on the two new CO₂M Sentinel satellites.

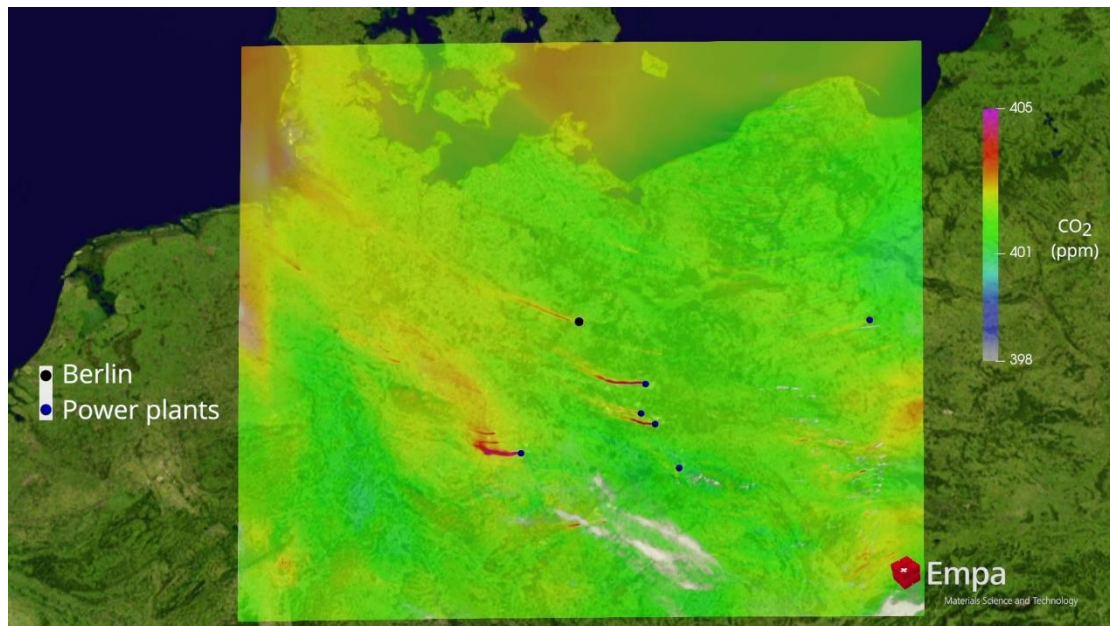
" AMOS is particularly proud to contribute to the CO₂M mission, stressed Philippe GILSON, the CEO of the Liège based company. We have been engaged in Earth Observation missions for 20 years. Providing scientists with state-of-the-art tools to better understand our planet and to monitor our environment is at the core of our mission and very much in line with the values of our company. But CO₂M is really special in that it addresses global warming, probably the most pressing and challenging issue mankind has to face in this century. Contributing to such an important goal gives a strong meaning to our everyday work. "



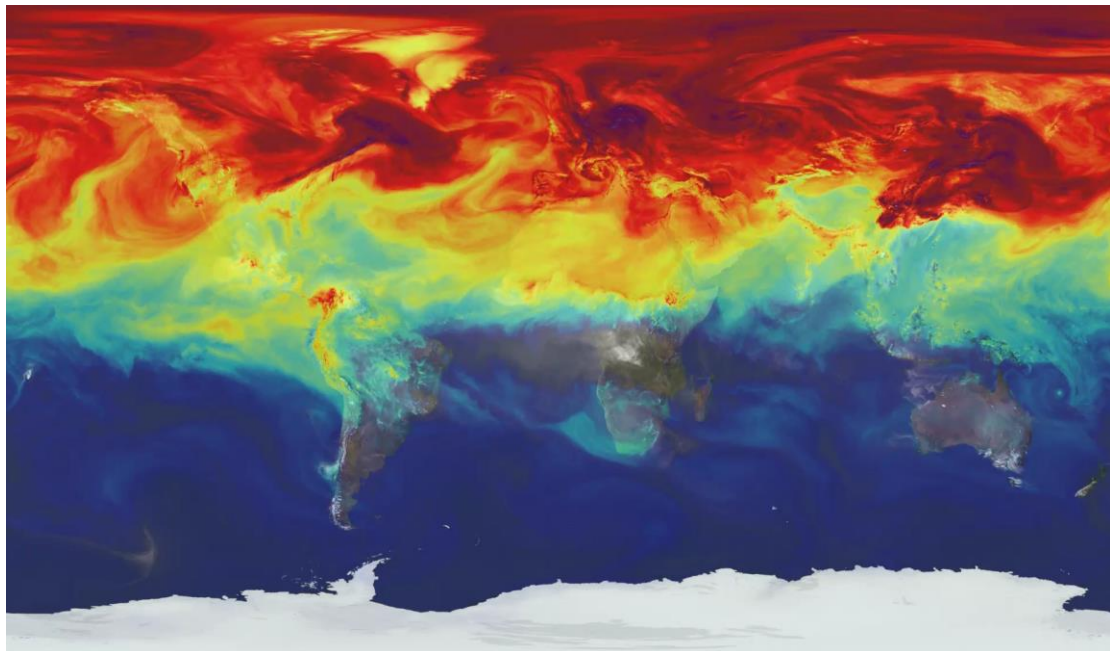
One of the Proba-V telescopes manufactured by AMOS, similar to those to be built for the CO2M Cloud Imager (Copyright: AMOS)



Artistic representation of a CO2M satellite (Copyright: OHB)



Simulated data showing carbon dioxide plumes
(Copyright: Empa, Swiss Federal Laboratories for Materials Science and Technology)



Global concentration of CO2 in the spring season (Copyright NASA/JPL-CALTECH)

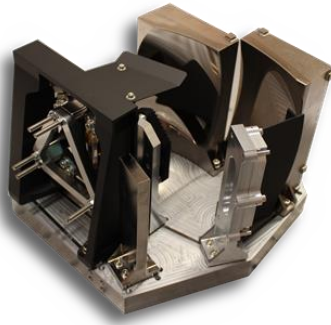
More info:

CO2M mission: <https://www.bbc.com/news/science-environment-53613336>
Proba-V mission: <https://proba-v.vgt.vito.be/en/about/proba-v-satellite-mission>
Copernicus: <https://www.copernicus.eu/en>

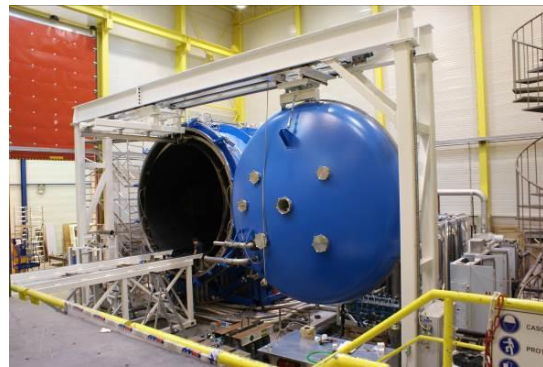
AMOS in a few words

Located in Belgium, AMOS has been designing and building high-precision optical and mechanical equipment for more than 35 years. Its main achievements are professional telescopes, space optical systems, test equipment for space instruments, and high-precision mechanical equipment. It employs more than 100 employees highly skilled in advanced technologies and offers services to the space industry, to the professional astronomy sector, to scientific laboratories and to industry.

AMOS has customers in Europe (ESA, ESO, AIRBUS DEFENCE & SPACE, THALES ALENIA SPACE, OHB, OIP), in the United States (AURA), in India (ISRO, PRL, ARIES), and has more recently expanded its business in countries like China, Turkey and Russia.



Spectrometer of the ELOIS hyperspectral camera



Thermal-vacuum Test Facility for VSSC (ISRO)



ATS (Auxiliary Telescope Systems),
“mobile” telescopes of the VLTi in Chile (Cerro Paranal)

More information:

www.amos.be

<https://www.linkedin.com/company/amos/>

Contact:

Mr Xavier VERIANS – Business Development Director

xavier.verians@amos.be

+32 4 361 40 40