

After Jupiter, AMOS optics successfully enter Mars orbit

Congratulations to the ExoMars teams! This Wednesday October 19th 2016, the space probe ExoMars 2016 successfully performed the maneuvers necessary to get captured by Mars' gravity. It is now in elliptical orbit around Mars and will take its first images of the planet in the coming weeks.

AMOS employees are particularly proud to be part of this adventure, as they have supplied critical optics for two of the major instruments of this exploration mission: *The Colour and Stereo Surface Imaging System* (CASSIS) and the *Nadir and Occultation for MArs Discovery* (NOMAD).

CASSIS is a camera that will acquire stereoscopic views of the red planet's surface. This means that, by taking two images of each scene with a different angle, it will allow to build 3D maps of the surface of Mars. AMOS has manufactured three high precision mirrors that will now start collecting the light reflected by the Mars surface and focus it onto the camera detectors of this instrument.

NOMAD is a spectrometer entirely built in Belgium. Its goal is to analyze the Martian atmosphere. At the heart of the instrument is an optical component, called a diffraction grating, which spreads the light into its different wavelengths, like a prism, but with a much better performance. AMOS was in charge of manufacturing and testing this critical component which will allow to better understand the origins and the concentration variations of the various gases present in Mars' atmosphere, focusing especially on methane in order to try to determine if life is, or has been, present on Mars.

"AMOS is glad to contribute to this new success of the European exploration of our solar system, declared Philippe Gilson, the CEO of AMOS. This demonstrates that, by constantly increasing the quality of the optical components produced in our workshop, we are recognized as a member of the small club of companies able to meet the requirements of such space exploration missions, and we are already working on the preparation of other - even more demanding - ones."









On the left: Diffraction grating manufactured by AMOS for the NOMAD instrument On the right: CASSIS instrument containing the AMOS mirrors (© University of Bern)



View of the Exomars 2016 TGO probe (credit: ESA/ATG medialab)

Useful links: www.amos.be

Contact : Mr Xavier VERIANS – Business Development Director xavier.verians@amos.be +32 4 361 40 40



PRESS RELEASE

AMOS in a few words

Located at the heart of the "Liege Science Park" in Sart Tilman, Liège, AMOS has been designing and building high-precision optical and mechanical custom equipment for more than 30 years. Its flagship achievements are professional telescopes, terrestrial or space optical systems, test equipment for space devices, and high-precision mechanical elements. It occupies today more than 100 employees highly skilled in advanced technologies and offers services to the space industry and to the professional astronomy sector.

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



Hyperspectral Imaging Spectrometer for the lunar mission Chandrayaan II of ISRO



Thermo Vacuum Test Facility for VSSC (ISRO)



ATS (Auxiliary Telescope Systems), "mobile" telescopes in the VLTi in Chile (Cerro Paranal)