Press release

Date: 29/06/2021



Imminent lift-off for the Asclepios analogue space mission

The analogue space mission Asclepios I will start in two weeks. Aiming to simulate a scientific expedition to the Moon, this project is led by EPFL students in partnership with many actors of the industry. The mission will take place in underground tunnels at Nagra's Grimsel Test Site in the Bernese Alps from the 12th to 20th of July 2021.

Analogue space missions

The Asclepios project organises analogue missions made by and for students. These missions simulate real space activities while remaining on Earth. They provide a platform for laboratories and the industry to implement and test their experiments or prototypes under realistic conditions. The idea behind the project is that today's students will most likely be tomorrow's astronauts and aerospace engineers. They can therefore gain first-hand experience through the Asclepios project and its missions.

A lunar daily life

Although nothing takes place in space, the aim of an analogue mission is to be as serious as if it were actually taking place there. On Earth, four teams will take turns at the mission control centre to ensure constant liaison with the base. The analogue astronauts will have a busy schedule. Every hour of the day will be planned to complete the marathon that is life in space. Conducting scientific experiments, repairing the base, exploring lunar caves, every minute counts because on the Moon, astronauts' time is precious. Life itself will be a challenge as the analogue astronauts will have to live together for ten days in a spartan base with no sunlight and where even the temperature is rationed.

More than a student project

In order to achieve the desired level of realism, the teams were well supported. The project was able to establish partnerships with educational institutes to enable the implementation of university work. Students were thus able to carry out their master's project within the framework of Asclepios, from the architecture of the base to the communication software. No less than 13 scientific experiments proposed by laboratories will be at the heart of the Asclepios I mission. Professional mentors such as Swiss astronaut Claude Nicollier and Professor Marc Toussaint from the European Space Agency (ESA) advised the members during the development of the mission.

Useful links:

- <u>Everything on the project</u> <u>https://asclepios.ch/asclepios-en/the-project/</u>
- <u>The Asclepios I mission</u> <u>https://asclepios.ch/asclepios-i/</u>
- <u>Grimsel Test Site, Nagra, Asclepios I partner</u> <u>https://www.nagra.ch/en; https://www.grimsel.com/</u>

Complementary informations:

Léonard Freyssinet, Head of communication leonard.freyssinet@epfl.ch +33 782 100 900 http://asclepios.ch/asclepios-en/the-project/



Scaphander training with the 4D Umbilical team and Odysseus 3.1 during a training weekend at Chamagnieu. (credit: Odysseus 3.1)



Workshop in polar conditions in Crans-Montana with the explorer Alban Michon (February 2020, starting from left: Eleonore Poli, Christian Cardinaux, Manuela Raimbault, Sebasthian Ogalde Castro, Willem Suter, Alban Michon, Sophie Lismore)

Additional photographs

When an origin isn't provided, you can consider that the photographs below have been taken by members of the Asclepios project and can be credited as coming from the project.



Lunar base airlock at the Grimsel Test Site (Credit: nagra).



Photograph of an underground test tunnel in the Grimsel test site. (credit: Comet Photoshopping GmbH, Dieter Enz.)



Analogue astronaut Lismore exploring a cave at the Grotte de Vallorbe wearing one of the mission's spacesuit. (Credit: Justine Willa)



Underwater activities led by the association Odysseus 3.1 during a training weekend at Chamagnieu, France. (credit: Odysseus 3.1)



Mission control center during the rehearsal of the Asclepios I Mission at EPFL (February 2020, starting from left: Matthieu Leydier, Christian Cardinaux, Elfie Roy, Aubin Antonsanti, Marcellin Feasson)



Analogue astronauts of the Asclepios I mission at EPFL. (From upper left to upper right: Julien Corsin, Willem Suter, Christian Cardinaux, Eleonore Poli, Sebasthian Ogalde Castro. From lower left to lower right: Aubin Antonsanti, Sophie Lismore, Manuela Raimbault)