## Press release

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# Under-pressure training for the analogue astronauts of Asclepios

The Asclepios analogue space mission will hold one of its training sessions near Lyon between the 11th and 13th of June. In partnership with the environmental protection association Odysseus 3.1, the six analogue astronauts of the mission will be able to put on a deep-sea diving suit and train in simulated reduced gravity conditions in the Chamagnieu quarry and in the Meyzieu pit.

#### Analogue missions

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

#### "Lunar" trainings

To prepare for such an undertaking, the project organised lengthy selection campaigns to choose its analogue astronauts, the main requirement being that they be students. The selected astronauts were chosen in December 2019 to form the Genesis crew of the first mission: Asclepios I. For over a year, they underwent physical, technical and scientific training to prepare them for their tasks during the mission. The crew also participated in special training such as a three-day survival course in the snow of Crans-Montana in Switzerland, diving under the ice of Lake Moubra.

### A special dive

The weekend of 12-13 of June, consisting of multiple dives, is part of this special training. Among the many activities planned for the Genesis crew are the handling of underwater thrusters, the use of a dry suit and the testing of an individual vehicle designed by artist Romain Lardanchet and engineered by the Odysseus 3.1 team to mimic the space seats used during spacewalks by astronauts. This busy programme is designed to reproduce reduced gravity conditions thanks to the water in the pools. In addition, both water and space share the constraint of requiring the use of artificial respiration equipment. The dive allows the analogue astronauts to experience conditions similar to those of the environment they are supposed to be in. Finally, space is above all physically demanding, allowing training in an environment that makes the use of tools rather destabilising.

#### **Professional supervision**

The technicality of this training is among the greatest that the Asclepios project has had to face. Such an organisation would not have been possible without the help of Odysseus 3.1, an environmental protection association from Lyon known for its daring actions both in cleaning up polluted environments and in promoting the beauty of ecosystems. In a way, the association shares with Asclepios the objective of promoting science through extraordinary activities. This training is as much an opportunity to highlight unconventional diving techniques as it is to shed light on the Chamagnieu quarry.

Useful links:

- Everything on the project <u>https://asclepios.ch/asclepios-en/the-project/</u>
- Odysseus 3.1 (french) https://odysseus31.com/
- Press folder of Odysseus 3.1 (french) <u>https://odysseus31.com/wp-content/uploads/2021/05/DOSSIER-PRESSE-OD</u> <u>YSSEUS-3.1.pdf</u>

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