

UZH Space Hub Newsletter



Dear UZH Space Hub Community

In this newsletter, you can learn more about the Covid-Testzentrum we are supporting in Dübendorf, find out some new opportunities for students and for advertising your research, and have the possibility to discover something more about our members. This month, in the section *Meet a Space Scientist*, we will talk about cellular response to hypoxia.

Finally, we would like to wish you all a merry Christmas and a safe and happy new year.

Have a nice read,

UZH Space Hub Team

News



UZH Space Hub supports Corona Drive-in-Test Center

Following a request of the Department of Health of the canton Zurich, the University Hospital Balgrist has built up a Corona Drive-in-Test Center at the airfield Dübendorf. The project is supported by the Air Force Center and the UZH Space Hub, enabling a start of testing only 2 weeks after the idea. The UZH Space Hub, under the lead of Oliver Ullrich, supports the center with organizational and conceptual work, and by recruiting of personal. A whole laboratory has been built up in an airfield, where the SARS-CoV-2 Antigen Tests are executed under the lead of UZH Space Hub member Cora Thiel. For the difficult task of establishing a laboratory for high-throughput testing from scratch, Oliver Ullrich and Cora Thiel could profit from 15 years of experience with space-projects that demand worldwide laboratory work under high time pressure and difficult conditions. The UZH Space Hub is happy to use this experience now to support the city and the canton in fighting the pandemic.

Image credits: Federal Department of Defence, Civil Protection and Sport (DDPS)

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Covid Test Center in Dübendorf: a unique glimpse behind the scenes

The UZH Space Hub, together with the Air Force Center, is supporting the Corona Drive-in-Test Center, that was newly built and operated at the Dübendorf airfield by the University Hospital Balgrist, following a request of the Department of Health of the canton Zurich. Our UZH Space Hub colleague, Dr. Svantje Tauber, is currently working there and gave us a special point of view in her interview.



[Read more](#)

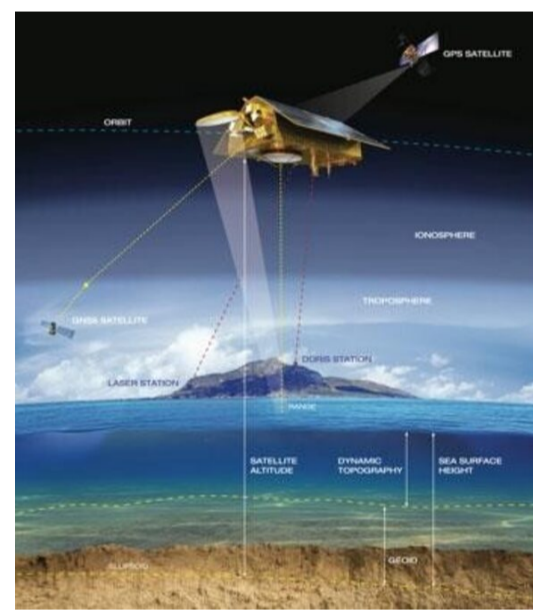


Satellite-based Inspection of Large Vegetated Areas

Congratulations to the UZH spin-off ExoLabs, whose proposal, SILVA (Satellite-based Inspection of Large Vegetated Areas), has been accepted for funding by the "Mesure de Positionnement" - a Call by the Swiss Space Center. SILVA will combine expertise from Earth observation service providers (ExoLabs), deep learning (EcoVisionETH), and forest research (Eidg. Forschungsanstalt WSL) in an innovative holistic approach. The aim is to detect forest state and forest disturbances on a daily basis in a high spatial resolution of 20 m for the entire area of Switzerland and its surroundings. In addition, annual re-analysis data on forest height and disturbances will be provided for economic and political interpretation.

Successful launch for Copernicus Sentinel-6

On 21 November, the Copernicus Sentinel-6 Michael Freilich satellite has been successfully launched, joining the existing Copernicus Sentinel satellite family. It is the result of an extraordinary Europe-US cooperation involving the European Commission, ESA, EUMETSAT, NASA and NOAA, with support from CNES. Sentinel-6 will provide high precision ocean altimetry measurements and high-resolution vertical profiles of temperature, to assess temperature changes in the troposphere and stratosphere. An identical satellite, Sentinel-6B, will complete the mission in 2025. Illustration: Sentinel-6 Michael Freilich satellite. Credits: EUMETSAT

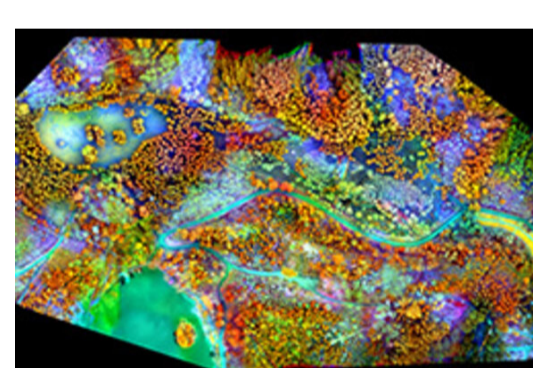


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SNSF Scientific Image Competition

Do you have a nice picture or video related to your research with which you would like to inspire, amaze, tell a human story or simply to let us discover a new universe? Then participate in the SNSF Scientific Image Competition! From the microcosm to the macrocosm, you can submit your images, either captured by using a camera or generated by a computer. Deadline for submission is January 31, 2021.

Credits: *The hidden forest* - 2019 Award in the category "Object of study", Adrian Meyer (Scientific collaborator - FHNW)

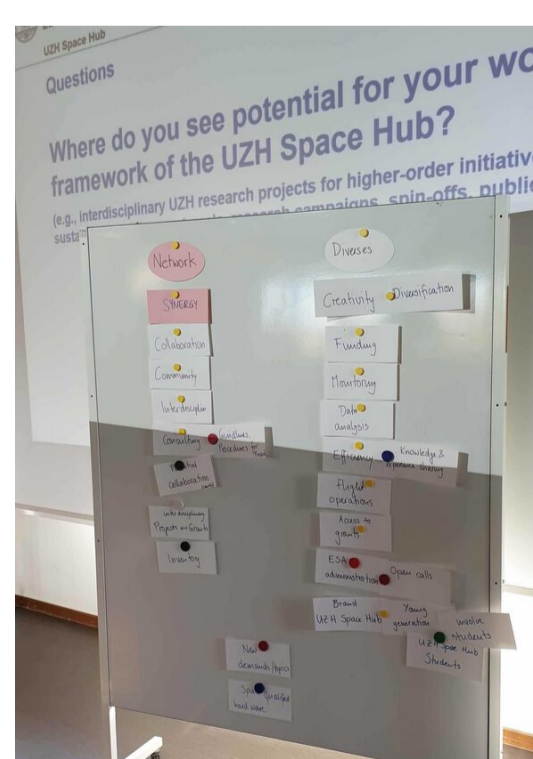


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Events

Next Annual Assembly

For UZH Space Hub community members: One year has already passed since our first community workshop. It is therefore time to gather your new inputs, needs and ideas, and to discuss about collaboration possibilities in our annual assembly. More information will follow in the next days.



Opportunities

ARIS updates

The student team of the *Akademische Raumfahrt Initiative Schweiz*, ARIS, presented the concepts for their three new projects: PICCARD (rocket project), DEADALUS (hybrid rocket engine) and PHOENIX (guided recovery). Are you a student and would like to contribute to the building of a sounding rocket? Check the ARIS webpage, there are still many open positions.

[Read more](#)

Meet a Space Scientist

This month we have interviewed Johannes Vogel, Professor and senior group leader at the Institute of Veterinary Physiology, University of Zurich. His research focuses on the cellular response to hypoxia, a condition astronauts have to face during extravehicular activities. Would you like to know more? Then, read the full interview.



[Read more](#)