

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
New Worlds - Non-Traditional Space Education and Outreach (7)

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INSPIRE THE NEXT GENERATION THROUGH THE AMADEE-18 MARS ANALOG SIMULATION

Abstract

The Austrian Space Forum - in cooperation with the Oman Astronomical Society - conducted a high-fidelity Mars Analog field simulation in the Dhofar region, Sultanate of Oman in February 2018. Directed by a Mission Support Center in Austria, a carefully selected and trained field crew of 15 conducted experiments from various disciplines (engineering, planetary surface operations, astrobiology, geophysics/geology, life sciences) preparing for future human Mars. Mars analog research in a representative environment is also an excellent tool to enhance the visibility of planetary sciences and to engage with the next generation of researchers.

The following programs were specifically set-up for the AMADEE-18 mission to engage with young people from 6 to 25 years:

Junior Researchers Program: Junior Researchers were invited to submit an experiment proposal and work through a typical peer-review process. The high school and undergraduate students had to define their research questions, implement their experiment, train the field crew and observe or tele-operate their experiment. Finally they had to publish their findings in the AMADEE-18 science workshop. In total 4 Junior Researchers Experiments were selected and conducted during the AMADEE-18 Mars Simulation.

Kids2Mars Program: In cooperation with innovaspace.org (Prof. Thais Russomanos), students from more than 35 nations between 6-18 years old were asking video questions about Mars space exploration to the AMADEE-18 field crew. These questions were then answered as video message by the field crew members in a suitable way for children and later posted distribute online and through social media.

Expedition Outlets: In selected science centers in Austria, live data or near-real time data streams were displayed to the general public. This was a unique opportunity for the general public to virtually participate in a simulated Mars mission. Visitors of the science centers could ask questions answered by the field crew in Oman. Experts for the Austrian Space Forum were deployed for lectures and supported special workshops as well. 360 video material as well as a pictures of the day were displayed to interact with the visitors on a visual, inspiring way. With this approach, non-space audiences could be approached and interested for the research field of planetary analog research.