

Jebel Madar Virtual Reality field trip: A unique immersive and collaborative virtual reality geologic experience.

The virtual field trip will be offered on September 25th. During this trip, all attendees virtually meet in Jebel Madar from their respective desktop locations. Together, with the immersive setting, we will discover the physical trip planned on 5th & 6th October. We will follow the trail planned for the actual field trip during the workshop in October. Thus, the attendees will visit the targeted outcrops of faults and fractures, where we will introduce some background information as well as conduct a variety of exercises.

The virtual field trip will also visit other locations on Jebel Madar with notable fracture and fault sets, that are otherwise impossible to reach. Further, the attendees will have the option to revisit the outcrops virtually at their own pace and conduct their own analysis before the workshop date.

Logistics

We are planning a morning and an afternoon session at 10 AM (CET) and 4 PM (CET). Each session will comprise a 15 minutes introduction followed by a 30 minutes Virtual Reality trip and 15 minutes Q&A.

The Virtual Field trip will be performed through the **VRExplorer** software (<https://www.vr2planets.com/education/>), from the company VR2Planets. VRExplorer is a software enabling geologists to practice field structural geology and analysis in the virtual scene. The 2D (screen view) and 3D (full immersive with VR headsets) versions of the software will be provided to the participants ahead of the session. We will invite the participants to use the 2D version of the Software during the collaborative Virtual field trip for a computer screen view experience. During the workshop in Muscat, we will explore the virtual outcrops with VR headsets for a full immersion view.

Hardware requirements

For 2D version (on screen using mouse and keyboard)

- Windows 10/11
- Graphic card at least Nvidia GTX 1080
- 8Go RAM
- Microphone and speakers mandatory, headset with microphone recommended

For VR version (with headset)

- Windows 10/11
- Graphic card at least Nvidia RTX 2070
- Wired VR headset (Vive, VivePro, Meta Quest 2/3 configured with Quest Link)
- 8Go RAM
- Steam and SteamVR installed and configured for VR
- MetaQuest soft installed and configured

All hardware/software setup must be up to date (Windows, SteamVR and graphic drivers)

VR2Planets'team is at your disposal to help you in the installation process:
contact@vr2planets.com