FROM APOLLO TRAVERSES TO FUTURE EXPLORATION

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Historically, Apollo program is known as the first time that human could land in other space object, in this case Earth’s moon, and come back safely to the Earth. It was the first time that humans had to adapt geological field work to extreme conditions in space. We can summarize the field work in a few steps: - Planning of the mission and field training of the astronauts. - Development of instrumental packages and reconnaissance of the area. - Geophysical measurements in situ and some sampling near the Lunar Module (LM). - Various EVA’s of an average of six hours, from Apollo 15 with Lunar Rover Vehicle (LRV) support, collecting samples and taking measurements of various geophysical experiments. From now to future exploration we have to focus on apply all the knowledge we have from Apollo traverses and adapt it to the new technologies we are developing. The use of robotic rovers can save us hours of human EVA’s in the way that we can predict the possible sites of interest before send human there. Also, the development of a field laboratory and habitat can provide us of the intruments necessary to do experiments without the need of a sample return mission. We validate these traverses in EuroMoonMars campaign.