Space Resources (10)
Space Resources (1) (1)

Author: Mr. Kyle Acierno
ispace, Inc, Luxembourg

ISPACE'S ISRU 2022 MISSION TO THE MOON

Abstract

ispace is a company whose vision is to expand and sustain humanity's presence in space by utilizing resources available on the Moon. In order to accomplish this vision, ispace set a 3-step roadmap: (Step 1) technology demonstration, (Step 2) transportation and resources exploration, and (Step 3) resources utilization. With proven technologies and a solid understanding of the lunar environment and resources ispace will be ready to execute the processing and utilization of lunar resources. The topic of presentation will provide an update on the development of two lunar landers, one being develop in Japan and one in the USA, and their respective missions in 2022 2023. In addition, this presentation will provide insight into the Polar Ice Explorer rover mission that is being developed in ispace's Luxembourg office. This mission goals are twofold, first to gain a better understanding of the occurrence and distribution of hydrogen on the Moon. Secondly, to obtain information regarding the environment on the lunar poles such as the geotechnical properties of the regolith and lander contamination, both of which will be valuable for oncoming in-situ resources utilisation (ISRU) missions.