

Space Studies of the Earth-Moon System, Planets, and Small Bodies of the Solar System (B)
Lunar Science and Exploration (B0.1)

THE NASA SOLAR SYSTEM EXPLORATION VIRTUAL INSTITUTE: INTERNATIONAL EFFORTS IN ADVANCING LUNAR SCIENCE WITH PROSPECTS FOR THE FUTURE

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The NASA Solar System Exploration Research Virtual Institute (SSERVI), originally chartered in 2008 as the NASA Lunar Science Institute (NLSI), is chartered to advance both the scientific goals needed to enable human space exploration, as well as the science enabled by such exploration. NLSI and SSERVI have in succession been “institutes without walls,” fostering collaboration between domestic teams (7 teams for NLSI, 9 for SSERVI) as well as between these teams and the institutes’ international partners, resulting in a greater global endeavor. SSERVI teams and international partners participate in sharing ideas, information, and data arising from their respective research efforts, and contribute to the training of young scientists and bringing the scientific results and excitement of exploration to the public. The domestic teams also respond to NASA’s strategic needs, providing community-based responses to NASA needs in partnership with NASA’s Analysis Groups. Through the many partnerships enabled by NLSI and SSERVI, scientific results have well exceeded initial projections based on the original PI proposals, proving the validity of the virtual institute model. NLSI and SSERVI have endeavored to represent not just the selected and funded domestic teams, but rather the entire relevant scientific community; this has been done through many means such as the annual Lunar Science Forum (now re-named Exploration Science Forum), community-based grass roots Focus Groups on a wide range of topics, and groups chartered to further the careers of young scientists. Additionally, NLSI and SSERVI have co-founded international efforts such as the pan-European lunar science consortium, with an overall goal of raising the tide of lunar science (and now more broadly exploration science) across the world.