

NASA Mission Applications of Citizen Science. B. H. Day¹ and B. K. Mitchell², ¹NASA Lunar Science Institute, Ames Research Center (brian.h.day@nasa.gov), ²NASA Lunar Quest Program Office, Marshall Space Flight Center (brian.k.mitchell-1@nasa.gov).

Abstract: Citizen science marks the intersection of E/PO and science. Certain technologies, mission constructs, and E/PO plans facilitate participation, directly involving students and the public in the science supporting a mission. The benefits from well-implemented citizen science programs extend significantly beyond enabling extensive data collection. Through such programs, students and the public increase their own understanding of the mission's science and technology, increase their appreciation for the mission's relevance, realize that becoming a scientist or engineer is attainable and interesting, and become advocates among their peers. However, implementing a citizen science program that provides real benefits to both the mission science team and participating citizen scientists presents notable challenges.

In this talk, we will look at citizen science programs implemented by a number of past and current missions, including the recent LCROSS mission. We will discuss the successes and challenges associated with these programs and how the lessons learned can be applied to future missions, using the upcoming Lunar Atmosphere and Dust Environment Explorer (LADEE) mission as an example.