

Technology Roadmaps for Space Exploration (09)
Technology Roadmaps for Exploration (1)

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NASA'S SPACE TECHNOLOGY ROADMAPS – STATUS AND FUTURE DIRECTIONS

Abstract

Under the auspices of NASA's Office of Chief Technologist, six-person teams of specialists drafted a set of fourteen space technology roadmaps, each of which described their technology area's top technical challenges, spaceflight missions they could impact or enable, and – as a byproduct – important terrestrial fields they could advance. The set of draft roadmaps, which cover both human and robotic technologies, was distributed publicly in December 2010. At the same time, NASA contracted with the National Research Council (NRC) to perform an independent critique of the draft roadmaps. Through the NRC's participation, public comment was received via open workshops and white paper submissions, and expert panels were established to review the comments, establish evaluation criteria, identify gaps, and eventual prioritize the technologies in each roadmap report. An overall steering committee of the NRC will prioritize specific technology needs between the technology areas, and release their final report early in 2012. This paper will cover themes that emerged as common across the fourteen technology areas, as well as the NRC's final report, and the status of NASA's response to the NRC's findings and recommendations.