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OPTIMIZE USE OF SPACE RESEARCH AND TECHNOLOGY FOR MEDICAL DEVICES

Abstract

NASA's Earth and space science programs rely on advanced instruments; telescopes; various complex software systems; and cutting-edge component technologies to conduct a wide range of scientific observations and measurements. These technologies are also considered for practical applications that benefit society in remarkable ways. The technology transfer initiative at NASA Goddard focuses on matching Earth and space science technologies to targeted industry sectors and national needs. This requires knowledge of industry technology trends and challenges and social priorities. Matching technologies is done through passive means of publishing and distributing technology prospectus and new technology articles via technical events and professional publication channels. There are also face to face tech briefings hosted by NASA Goddard to allow scientist, technologist, and tech transfer experts to have detailed discussion with prospective users of the technology. The goal of the tech briefing is consistent with the overall NASA technology transfer goal. Create an environment where innovative ideas can flourish that will lead to an innovation agreement—a combination of a license and NASA space act agreement or one or the other with the intent to commercialize NASA Goddard's technology. The tech briefing format for space science technologies applied to non-space visualization applications includes tours of unique NASA Goddard facilities and laboratories as well technology demonstrations. Examples of technologies demonstrated that have resulted into uses beyond the space program are information systems—software segmentation/simulation/data management/image processing; data compression; optical systems; and, detector devices. This paper will focus on how to augment and perhaps replicate the NASA Goddard technology transfer initiatives that lead to Earth and space science technologies used for non-space visualization applications.