22nd SYMPOSIUM ON SPACE ACTIVITY AND SOCIETY (E5) The Effect of Space Visualization Tools in Commercial Markets (3)

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IDENTIFICATION OF NASA IMAGING SOFTWARE FOR MEDICAL IMAGING APPLICATIONS

Abstract

NASA Goddard Space Flight Center (NASA GSFC) develops a lot of software to research scientific theory relative to Earth and space science. Many new data processes and algorithms are created to investigate and prove the various scientific theories. Such processes and algorithms are required to be registered with the Innovative Partnerships Programs Office (IPPO) at NASA's Goddard Space Flight Center (GSFC). Doing so yields the opportunity for the IPPO to assess the processes or algorithms for use beyond their original NASA intent. Results were favorable in addressing the relevance of NASA GSFC scientific processes or algorithms that had implications in medical imaging.

Several years ago the IPPO held a conference to discuss NASA GSFC developments in imaging software that could be used in medical device applications, specifically for the purpose of imaging. The objective of the conference was to 1) make the NASA GSFC scientist knowledgeable of how their work could be used to advance medical imaging applications, and 2) provide awareness to industry users and developers of how NASA GSFC imaging technologies could apply to their product needs.

The IPPO was very strategic in identifying possible NASA GSFC technologies for medical imaging applications and being able to communicate the opportunity to the medical device industry. The conference venue offered an opportunity for NASA scientist to give background on their technology development and dialogue with representatives from the medical device industry about their needs and requirements. The end result was driven by industry to license and partner with NASA GSFC to build new advanced technology imaging devices.

This paper will discuss the methodology behind how the U.S. space program captures and assesses technology for targeted industry use with a commitment of making space technology relevant beyond its original intent.