Paper ID: 88878
oral

35th IAA SYMPOSIUM ON SPACE AND SOCIETY (E5)
Interactive Presentations - 35th IAA SYMPOSIUM ON SPACE AND SOCIETY (IPB)

Author: Dr. Adi Ninio Greenberg
Israel Space Agency, Israel

THE ROLE OF SPACE AGENCY IN MAKING SPACE-BASED TAILOR-MADE SOLUTIONS FOR DECISION-MAKERS

Abstract

Remote sensing satellites provide space-based data which is abundantly accessible to a variety of users in tackling climate and environmental challenges. However, many users are unaware of the potential advantages of remote sensing data in their daily operations. The contribution of the national space agency as an enabler of decision making tailor made solutions in the fields of environment and climate increases as the information produced from satellites grows exponentially. In this paper, we discuss the process, elaborating with examples, of the actions taken by the Israel Space Agency (ISA).

We detailed the process taken during the last year by the Israel Space Agency, starting with mapping the stakeholders and decision makers who may benefit from the service, including government ministries, authorities, academic institutions and private industry focusing on environment and climate challenges. This work phase was an ongoing process that included professional meetings, conferences, conducting surveys of the industry and ecosystem and any activity that would make remote sensing accessible to the users and lead to the understanding that space-based solutions can be used like any other terrestrial solutions and sometimes even simpler in execution. Once achieved, it is possible to proceed to the following phases, which include mapping the specific needs, analyzing and matching for each use and examining the scope of available solutions.

Among the variety of possibilities for producing knowledge from data, creating international projects for common goals is a leading alternative. We will detailed the process by using the VENμS satellite example, a research satellite project for environmental and climate monitoring purposes, a successful collaboration between French space agency (CNES) and ISA. Extracting knowledge from VENμS satellite is valuable to many stakeholders in Israel and abroad. Examples are, using change detection and forecast based on the VENμS data for Mekorot authority (The national water reservoirs authority) and the Israel Electric Corporation for monitoring the national electrical facilities.

The final phase of the process between ISA and the stakeholders is standardization of the space-based tools and solutions. The goal is creating a national standard to be used by all current and future stakeholders. Therefore, ISA is initiating the ISKC (Israel Space Knowledge Center) project for streamlining satellite data and knowledge to decision makers in Government and in the space ecosystem.

We demonstrate how space agencies can lead national processes for governments and other stakeholders to maximize the contribution of space-based remote sensing data.