

NASA Earth Observations and the NASA Earth Science Disasters Program: Providing data, services and science expertise to inform end user decision-making throughout the disaster management cycle

Abstract

The NASA Earth Science Applied Science Disasters Program promotes the use of Earth Observations (EO) to inform disaster risk reduction and resilience throughout the disaster management cycle, from local to global scales. This is accomplished through harnessing NASA science and technology capabilities, engagement with end users to demonstrate the value and impact of EO to support decision-making, and support of end users in their use of EO in decision-making. The NASA Earth Science Disasters Program Mapping Portal, an Esri-backed hub of geospatially enabled disaster products, hosts event-based and near real-time products to provide end users with satellite data products that meet their expressed EO needs. In this presentation, case studies of past disaster events will be highlighted, showcasing how EO data and services were provided by the Program and utilized by end users during the disaster management cycle to meet their needs. Additionally, this presentation will highlight some of the Program's ongoing collaboration activities to assist end users in understanding and preparing for utilization of EO data from the Mapping Portal to inform their decision-making throughout the disaster management cycle. Ongoing efforts to advance the science provided by the Program on the Mapping Portal through new developments and capabilities will be highlighted, and common challenges and data needs end users often encounter when using EO data and our Program's innovative solutions to these challenges will be addressed. Furthermore, this presentation will touch on the challenges faced, gaps identified, and solutions created by the Mapping Portal team in managing and hosting a plethora of EO data for end users across various disciplines.

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