

PDC2023
Vienna, Austria

Please submit your abstract at <https://atpi.eventsair.com/23a01---8th-planetary-defense-conference/abstractsubmission>

You may visit <https://iaaspace.org/pdc> for more information

(please select the topic that best fits your abstract from the list below)
(you may also add a general comment - see end of this document)

Ongoing and Upcoming Mission Highlights
Key International and Policy Developments
Near-Earth Object (NEO) Discovery
NEO Characterization
Deflection / Disruption Modeling & Testing
Space Mission & Campaign Design
Impact Effects & Consequences
Disaster Management & Impact Response
Public Education and Communication
The Decision to Act: Political, Legal, Social, and Economic Aspects

USING GIS TO IMPROVE DISASTER RESPONSE FOLLOWING AN ASTEROID IMPACT

Monica Maynard

⁽¹⁾ *The Aerospace Corporation, 2310 E. El Segundo Blvd.
El Segundo, CA 90245, 310-606-9490, Monica.I.Maynard@aero.org*

Keywords: *Disaster Response, GIS, Mapping, Remote Sensing*

ABSTRACT

Natural disasters have plagued humanity for thousands of years. Civilizations have learned to adapt to a changing world and create ways to cope with these catastrophes. With the onset of newer technology, Geographical Information Systems (GIS) has been used to help communities in mitigation and preparedness prior to the occurrence of a natural disaster. More recently, GIS has been improved and implemented in the response and recovery efforts after a natural disaster. Although mitigation and preparedness are important to lessen the effects of a disaster, the response, and subsequent recovery, to such disasters is paramount to decreasing its effects on the population. This project seeks to bring light to the immediate outcomes following an asteroid impact and how communities can use GIS to guide recovery endeavors. Using GIS in tandem with remote sensing, in real-time, can be used by agencies to collaborate and respond to locations with the greatest need. GIS cannot only be used at the community level by local agencies, but also at a global level to bring resources and collaborative efforts to the most impacted areas. GIS can also be used to identify available resources such as nearest hospitals, shelters, open roads or areas to avoid.

Comments:

Poster