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EXPLORING THE ROLE OF SPACE-BASED TECHNOLOGIES IN DISASTER MANAGEMENT:
CHALLENGES AND OPPORTUNITIES**Abstract**

The rapid increase in natural disasters and other global crises in recent years has created an urgent need for effective disaster management strategies. Space-based technologies offer a unique and powerful tool for managing disasters, providing critical data and enabling real-time communication and decision-making. This project aims to explore the role of space-based technologies in disaster management, identifying the challenges and opportunities that arise from their use. Specifically, the project will investigate how space-based technologies can be utilized in emergency response, preparedness, and recovery efforts. The project will begin by conducting a comprehensive review of existing literature on space-based technologies and disaster management. This will involve analyzing case studies from previous disasters, as well as reviewing academic literature and industry reports. The goal of this review is to identify the key ways in which space-based technologies have been utilized in disaster management to date, as well as the major challenges and limitations that have been encountered. The project will then move on to a series of empirical studies designed to deepen our understanding of the potential of space-based technologies in disaster management. These studies will involve conducting interviews with disaster management experts and stakeholders, as well as analyzing satellite data and other relevant sources of information. The results of these studies will be used to identify best practices for utilizing space-based technologies in disaster management, as well as to develop recommendations for future research and policy initiatives. The ultimate goal of this project is to develop a comprehensive understanding of the challenges and opportunities presented by space-based technologies in disaster management, and to identify practical strategies for maximizing their potential. By bringing together experts from a range of fields, this project will contribute to a broader interdisciplinary dialogue on disaster management, with the aim of fostering more effective and resilient disaster response efforts around the world.