

ACTINSPACE 2026

CHALLENGE 2

THEME OF
THE CHALLENGE

**Space for Earth &
Humanity**

Celestial Sentinels: Satellite Data for a Resilient Planet

Imagine an innovative initiative harnessing the power of satellite imagery to monitor and track the progression and spread of diseases on Earth. This project would leverage high-resolution satellite data to observe how diseases evolve, impact populations, and interact with various environmental factors to understand the conditions that contribute to disease proliferation, including climate, population density, vegetation, and other variables.

CHALLENGE
FROM



► FROM SPACE

By observing changes in land use, agricultural practices, and natural resources, the project would provide valuable insights into how these factors influence disease dynamics and public health. This holistic approach would also consider health risks associated with environmental degradation, such as pollution and habitat loss, which can exacerbate disease outbreaks.

Using artificial intelligence to process vast amounts of data, uncover patterns and trends, and make predictions about disease outbreaks and food security challenges. This predictive capability would allow for timely interventions and effective strategies to mitigate the impact of diseases on affected populations and ensure food security.

This comprehensive approach would revolutionize disease monitoring and response efforts, offering a global perspective on public health and safeguarding food resources. This initiative would facilitate international collaboration, sharing knowledge and resources to enhance global health security and food security. It would enable more informed decision-making, improve public health outcomes, and ultimately save lives.

► TO THE CHALLENGE

Your challenge is to determine the optimal satellite observation technology, devise a strategy for data management and analysis, establish connections with industry and governmental organizations, and finally, present a comprehensive business plan for developing a successful company.

► BUSINESS SECTORS FOR THIS CHALLENGE

#RemoteSensing

#AI

#PublicHealth