

Topics (T)

Earth Observing Missions and Systems to Address Climate Change and Its Impacts [2] (3B)

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HIGH RESOLUTION THERMAL MONITORING IN CLIMATE; OPPORTUNITIES AND CHALLENGES

Abstract

Satellite high resolution thermal data has become an increasingly valuable tool for understanding and monitoring the Earth's climate. This type of data is collected by sensors on satellites that measure the temperature of the Earth's surface at a high resolution. The data can be used to study a variety of climate-related phenomena, including land surface temperature, sea surface temperature, and atmospheric temperature. These measurements can provide valuable information on the functioning of Earth's climate system and the impact of human activities on the climate.

High resolution thermal data can be used to improve weather forecasting, predict the spread of wildfires, and monitor the health of crops. Additionally, the data can be used to detect and track changes in the Earth's surface temperature, which can provide insight into the causes of climate change and help inform the development of mitigation and adaptation strategies.

In this session, we will cover the technical specifications limitations and potential for the upcoming Satellite Vu's high resolution thermal constellation with emphasis on the possibilities for climate monitoring.