# EarthCARE Satellite: Enhancing Climate Study with New Data on Clouds and Aerosols



**EarthCARE Satellite to Launch for Climate Study**

EarthCARE, a satellite designed to enhance weather forecasts and climate predictions, is set for launch from the Vandenberg Space Force Base in California. The mission is a collaboration between the European Space Agency (ESA) and the Japanese Aerospace Exploration Agency (JAXA). Scheduled for no earlier than May 28, the satellite will be launched aboard a SpaceX Falcon 9 rocket.

Conceived by Professor Anthony Illingworth of the University of Reading over 30 years ago, EarthCARE will collect data on clouds and aerosols, including dust and smoke, to study their role in cloud formation and Earth’s radiation balance. The mission aims to improve the understanding of how clouds affect climate change by reflecting sunlight and trapping heat.

The satellite, weighing over two tonnes and measuring approximately 17 meters in length, is equipped with four instruments, including a multi-spectral imager and a broadband radiometer, developed by UK companies. UK Space Agency partially funded the mission, contributing around 120 million euros.

Upon launch, EarthCARE will orbit Earth every 90 minutes at an altitude of 400km, providing vital data to aid in climate change mitigation efforts.

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