



The German EarthCARE Project Office: Preparing the German Research Community for the Launch of EarthCARE

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The EarthCARE (Earth Cloud Aerosol and Radiation Explorer) satellite mission is the next evolution in multi-sensor space-borne observations and synergistic data products. With an expected launch date in late 2019/early 2020, this joint mission between the European Space Agency and the Japanese Aerospace Exploration Agency aims to observe interactions among radiant energy transfer, clouds, aerosols and precipitation, so as to better understand controls on Earth's energy budget. The novel features of the satellite (e.g. coincident measurements, higher radar sensitivity, Doppler capability, and measured lidar extinction) provide an exciting opportunity to perform more accurate and informed analysis than before.

The German EarthCARE Project Office in Hamburg, Germany has been set up to aid the German research community in developing the mechanisms to advance their anticipated activities with regard to EarthCARE. A number of German research groups are already involved in the development and calibration of instrument components and retrieval algorithms, and plans are underway to provide validation of EarthCARE's data products. The final element to be put into place is the community-wide pursuit of analyses and data product development (retrievals) aimed at resolving scientific questions. Upon the launch of the satellite, the community will be prepared to make the best use of the technology and data products offered by EarthCARE through coordinated and collaborative research efforts. This presentation aims to summarize the EarthCARE mission, describe the role of the German EarthCARE Project Office and provide a first look at the plans of the German research community.