Validation of the EarthCARE Mission

Rob Koopman, Alain Lefebvre, Damien Maeusli, Tobias Wehr, Michael Eisinger, and Montserrat Piñol Solé

This poster will address the geophysical validation for EarthCARE. This mission is developed by the European Space Agency (ESA) in cooperation with the Japan Aerospace eXploration Agency (JAXA); both space agencies also agreed to define and coordinate a joint EarthCARE Validation programme. Beside providing the Cloud Profile Radar instrument and making available the related ground processing facilities, JAXA is as well responsible for the commissioning of the CPR, including the associated Validation Plan and activities. ESA will then integrate the CPR Validation Plan part into the joint EarthCARE Scientific Validation Implementation Plan. The two Agencies have already begun to consolidate this joint Scientific Validation Implementation Plan, and its overall status will be presented. The poster will then focus on the ESA-led Validation activities, in particular on validation of the Level 1 products of the ESA instruments (ATLID, BBR, MSI) and on the ESA-developed Level 2 products. These ESA Validation activities have been the outcome of an announcement of opportunity that was issued in 2017 and for which more than 30 proposals had been received. A broad peer review of this programme took place in 2018 during the 1st ESA Validation Workshop in Bonn (held in concomitance with the 7th EarthCARE Science Workshop), and the conclusion was that if all Principal Investigators succeed to secure the corresponding funding, then the combined programme is adequate, with few areas for improvement remaining. Therefore, late opportunity still exists for supporting and complementing the EarthCARE Validation Plan.