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IAF EARTH OBSERVATION SYMPOSIUM (B1)

Future Earth Observation Systems (2)

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AEOLUS AND THE FUTURE EARTH EXPLORERS OF ESA

Abstract

A concise description is provided of the first results and lessons learned from the first months of operation of Aeolus, the latest satellite of the ESA's Earth Explorers family sent in orbit. Aeolus is a world premier mission, carrying for the first time, a Doppler Wind UV Lidar providing global observations of wind profiles from ground up to 30 Km altitude. In addition, the latest development status of the currently planned Earth Explorer missions is also provided. These missions are EarthCARE, Biomass and FLEX; each one of them will provide unique measurements to further our understanding of the Earth radiation budget and of the biosphere. They represent the next steps of the continuous effort spent, by the Earth Observation Programmes Directorate of ESA, to learn more about our planet and the impact that human activity is having on it.