



ESA's Campaign Activities in Support of Earth Observation Projects

Dirk Schüttemeyer, Malcolm Davidson, and Tania Casal

ESA, Mission Science Division, Noordwijk, Netherlands (dirk.schuettemeyer@esa.int)

In the framework of its Earth Observation Programmes the European Space Agency (ESA) carries out ground based and airborne campaigns to support geophysical algorithm developments, calibration/validation activities, simulation of future space-borne Earth Observation missions, as well as application developments related to atmosphere, land, oceans, solid Earth and cryosphere.

ESA has conducted over 150 airborne and ground based measurement campaigns in the last 37 years, of which more than 80 were carried out since 2005. During this period a number of campaigns have supported the preparation of ESA's atmospheric satellite missions. While these campaigns aim to provide fundamental information to address specific topics related to technology or satellite developments, the resulting datasets are also made available to the atmospheric science community as a whole for research and development activities.

The datasets together with their project descriptions are available from ESA's Earth Observation Campaigns Data web site: <https://earth.esa.int/campaigns>. Future campaigns supporting ESA's missions will further enrich the campaign database providing scientist opportunities to enhance their research.

We will provide an overview of the general campaign setup, typical campaign structure, and how these all integrate into the broader earth observation science strategy. In addition we will highlight recent activities and outline planned activities for the coming years.