Name of research institute or organization:

Institut für Atmosphäre und Klima (IACETH), ETH Zürich

Title of project:

RAMS II (Riming, Aggregation and Mass of Snowflakes)

Project leader and team

Dr. Eszter Barthazy, project leader
Dr. Klaus Beheng, Dr. Raphael Schefold, Björn Baschek, Philipp Senn, Aaron Bansemer

Project description:

The aim of the project was to investigate the properties of freely falling snowflakes (size, shape, fall velocity) and the process of aggregation in dependance of temperature, crystal types, precipitation rate and riming degree. To this end, four experimental sites were instrumented: Jungfraujoch, Eigergletscher, Kleine Scheidegg and Wengernalp. The most important instruments were two optical instruments to measure freely falling snow. In addition, a vertically pointing radar, a sounding station, two scales, another optical instrument, standard meteorological instruments and in-situ replication of ice crystals were used to measure and characterize snow precipication.

After an untimely leaving of a PhD student and the appointment of a new professor (with a change of the field of interest), studies related to snowflakes have come to an end by mid 2004 at the IACETH. The data of the CLACE-3 field campaign were not used for further research.

Key words:

snowflakes, riming, aggregation, fallspeed, ice crystal types

Collaborating partners/networks:

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