CMEM

Welcome to the CMEM site

The Community Microwave Emission Modelling Platform (CMEM) has been developed by the European Centre for Medium-Range Weather Forecasts (ECMWF) as the forward operator for low frequency passive microwave brightness temperatures (from 1GHz to 20 GHz) of the surface. (In the latest version (ver.6.1), it is possible to simulate brightness temperature up to 100 GHz by option)

It is a highly modular software package providing I/O interfaces for the Numerical Weather Prediction Community. CMEM's physics is based on the state-of-the-art parameterizations used in the L-Band Microwave Emission of land surfaces. CMEM modularity allows considering different parameterizations of the soil dielectric constant as well as different soil approaches (either coherent of incoherent) and different effective temperature, roughness, vegetation, snow emission model configurations and atmospheric contribution opacity models.

CMEM Documentation

> This page provides a complete description of the CMEM platform, including CMEM's implementation strategy, as well as its structure and physical parameterisations.

CMEM Download

> This page gives links to CMEM source code, input/output example, change log, bug reports etc..

CMEM How to compile

CMEM How to use

CMEM FAQs

CMEM Citing