



International working group on polarized radiative transfer

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An increasing number of remote sensing instruments (e.g. PARASOL, GOSAT, SCIAMACHY, GLORY-APS successor ...) measure polarization to obtain more detailed information about cloud, aerosol, and surface properties. To develop retrievals and for end-to-end simulations, highly advanced radiative transfer models and optical properties datasets for aerosols, water and ice clouds, as well as surface reflectivity are required. So far only a few model intercomparison studies have been done and there is not much benchmark data available.

The IRC working group on Polarized Radiative Transfer (IPRT) has been initiated in June 2011 in order to improve and develop polarized radiative transfer models. Model improvements are in particular necessary to enhance the speed of the calculations, to calculate polarization in spherical and/or 3D geometry, and to include realistic scattering and surface reflection matrices. The working group also focuses on intercomparison studies in order to establish and provide benchmark results. The IPRT website (<http://www.meteo.physik.uni-muenchen.de/~iprt>) serves as a platform to exchange information and data.

This presentation will provide an overview of the ongoing scientific activities of the working group.