



Characterization of the Radiation Regimes of the Tibetan Plateau

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The Tibetan Plateau, also known as the Qinghai - Tibetan Plateau, is a vast elevated plateau in Central Asia. It occupies an area of around 2.3 million square kilometer, and has an average elevation of over 4,500 meters. It is the highest and biggest plateau of the world and sometimes referred to as "the roof of the world". The plateau is covered with mountain ranges and its atmospheric environment has a great influence on the regional as well as on the global climate. There is a need to understand the energy budget of this complex region and its hydrological cycle. Radiative fluxes play an important role in this budget. At present, available information on such fluxes is very coarse and does not meet the requirements for forcing or evaluation of models in such complex terrain. We use an updated version of the University of Maryland Surface Radiation Budget (UMD-SRB) model driven with observations from METEOSAT-5 to derive radiative parameters and cloud information at high temporal and spatial resolution (hourly at 0.125 deg). Presented will be the analysis of the finding for a period of about five years.