



Low Clouds and Fog Along the South-Western African Coast – Satellite-Based Retrieval and Patterns

Jan Cermak

ETH Zurich, Institute for Atmospheric and Climate Science, Zurich, Switzerland (jan.cermak@env.ethz.ch)

An algorithm is developed for the detection of fog and low clouds along the South-Western African coast in Meteosat SEVIRI satellite data. A validation of the product using 1 year of CALIOP cloud lidar products shows reliable performance of the new product. Maps of the frequency of fog and low cloud in the study area are produced by systematic application of the new technique to all available Meteosat SEVIRI scenes from 2004 to 2009, for 7:00 UTC and 14:00 UTC. The highest occurrence frequencies are encountered in the area around Walvis Bay, with a peak in the summer months. Fog and low clouds clear by 14:00 UTC almost everywhere over land.