Title

Calibration of correction factors for the daily lightning quantities of starnet network using data from Field Mill, Belém campaign, CHUVA Project.

Authors

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Abstract

During the CHUVA project, Belém Campaign, models developed by Sá et al, 2011 (1.2) were used to forecast severe thunderstorms. These models use starnet network data for forecasting severe thunderstorms with lightning occurrence. During the period of Belém campaign some of the sensors of the starnet network had operational problems causing erros in the measured daily lightning quantities and affecting the performance of the forecast models. To optimize the forecast model, dynamic calibration factors for starnet network were developed taking into account the status of the network every 15 minutes; these factors were calibrated against field data observed by field mill in Belém. With the use of corrected data the forecast model had a success rate higher than 70% throughout the experiment.

References:

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