

STRATOSPHERIC ELECTRIC FIELDS DUE TO
ELECTRIFIED CONVECTIVE CLOUDS

by

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ABSTRACT

The results of the numeric computation of the stratospheric electric fields due to electrified convective clouds, considering the principal models of charge distribution are presented. Among other things, the results show that several electric field events measured at balloon altitudes and reported in the literature as due to unusual structures can be interpreted as resulting from a simple familiar vertical bipolar charge distribution with a positive polarity, if a constant convection current density inside the cloud is assumed.