

Chokchai Dechyotin 2012: A Study and Analysis of Impact of Global Warming on Lightning Activity in Thailand. Master of Engineering (Electrical Engineering), Major Field: Electrical Engineering, Department of Electrical Engineering. Thesis Advisor: Mr. Winai Plueksawan, Dr.Eng. 136 pages.

This thesis is a study of variation of lightning activity in Thailand due to influence of global warming. Analysis of the correlation of parameters affected by global warming with parameters produced by lightning phenomena in Thailand such as temperature, humidity, rain, wind speed, cloud amount, ozone and thunderstorm days resulting in useful information to support the design and installation of lightning protection system in Thailand.

The results of this study which analyzed 12 years of data, from 1997 to 2008 to be in the top 10 warmest years on record, implies that the amount of lightning increases by 4 % for every 1% global warming.

Student's signature

Thesis Advisor's signature

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