



## Lightning climatology over Greece

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This paper studies the spatial and temporal (seasonal and diurnal) variability of Cloud to Ground (CG) strokes over Greece and the surrounding maritime areas. Namely a nine-year period from 2005 up to 2013 is used and the analysed data are provided by the Very-Low-Frequency Lightning detection network ZEUS operated by the National Observatory of Athens. The areas with the highest thunderstorm activity are identified and related with the underlying physiographic characteristics. The monthly number of CG strokes varies depending on the season. The highest number of CG strokes occurs during summer, while the least number of CG strokes occurs in winter. The CG diurnal variability is consistent with the global lightning activity observations. Additional analysis focuses on the links of CG strokes with indices related with the atmospheric instability such as the Convective Available Potential Energy (CAPE).