Characteristics of Thunderstorms in Slovenia

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Lightning characteristics are very important when monitoring and nowcasting convection, especially severe convection. Lightning data together with satellite (Iršič Žibert, 2013) and radar data are the most important information for issuing detailed severe weather warnings. Lightning densities vary over Europe, with the highest density found at the intersection of the borders between Slovenia, Italy and Austria (Poelman et al. 2015, Feudale et al. 2013, Anderson et al. 2014). Despite being small, Slovenia has very diverse climatic characteristics: sub-Mediterranean in the South, Alpine in the North-West and sub-Pannonian in the East. This is the reason why special care in the interpretation of data is even more important.

This study presents the characteristics of thunderstorms over of Slovenia. Data from SCALAR/EUCLID ground network are used together with other remote sensing data. The characteristics of CG data over Slovenia are illustrated and discussed.

This study is important also in view of the future lightning sensor Lightning Imager (LI) on board Meteosat Third Generation. LI will complement the existing data from ground networks and will improve measurements especially of cloud to cloud data.

References:

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