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ABOUT LIGHTENING – ELECTRICITY AND MONITORING SYSTEMS

The present project has the purpose of describing the design and developing many systems protections against lightning through the analysis of the ground resistivity and the application of the standards of IEC 62305, in order to solve problems that are produced through the impact of an atmospheric discharge in the telecommunications nodes.

The design will be made primarily from the analysis of the ground resistivity using the “Wenner” method. Through experiences and data obtained in the field, the different factors that can affect the risk of heritage loss and the risk of human life loss, for which the design of the system of protection and the ground system has a direct relation, will also be considered. Also, the ground analysis is important to make prospections through the ground, related to the electricity, using mathematical methods as “Schlumberger”, with the main objective to characterize the layers inside the ground, or to find water or find caves. Nowadays, it is possible to relate the geoelectric and lightning, with the response of seismic instrumentation installed on a monitoring system, this purpose has the objective too learn about the relation to electricity and the ground.

E-mail

dgarcia@igepon.edu.ec

In-person or online preference

Primary author: Mr GARCIA CASTILLO, Dario Xavier (Instituto Geofísico de la Escuela Politécnica Nacional (IGEPN))

Presenter: Mr GARCIA CASTILLO, Dario Xavier (Instituto Geofísico de la Escuela Politécnica Nacional (IGEPN))

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