Analysis of Lightning Overvoltage on Signalling and Telecommunication Cables

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When lightning strikes, lightning overvoltage is generated by electromagnetic induction and it sometimes comes to signalling or telecommunication equipment through its cable. Therefore, it is necessary to figure out propagation of lightning overvoltage on cables when considering countermeasures against lightning damage to signalling or telecommunication equipment. The authors tried to apply numerical electromagnetic analysis and electrical circuit network analysis for figuring out lightning overvoltage on cables and found that it is reasonable to apply these analytical methods.