

# Lightning Surge Analysis using Finite-Difference Time-Domain (FDTD) Method

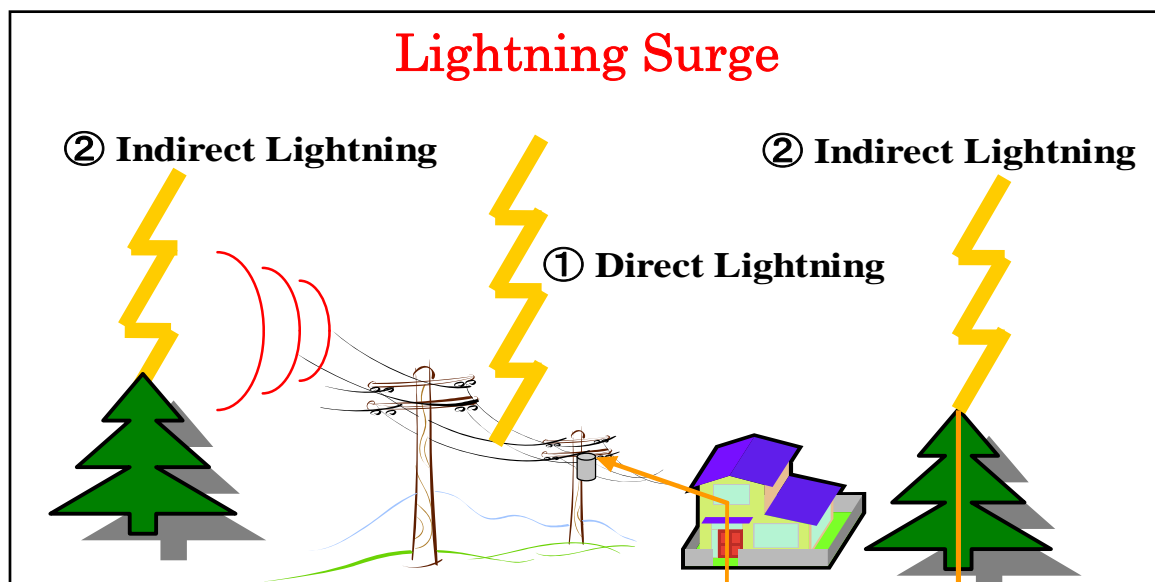


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<b>Keywords</b>	Lightning, High voltage, Electromagnetic Compatibility, Electromagnetic Field Analysis		
<b>Technical Support Skills</b>	<ul style="list-style-type: none"> <li>• Power system analysis</li> <li>• Electromagnetic simulation using FDTD method</li> </ul>		

## Research Contents **Lightning Surge Analysis using Finite-Difference Time-Domain Method**

Recently, the Finite-difference time-domain (FDTD) method has been proven to be one of the most effective numerical methods in the study of transient electromagnetic fields. As the direct solutions to the Maxwell's equations, the FDTD method offers a simple straightforward way to model complex structures. It has been applied to power system simulations such as ground electrode surge analysis, power cables, overhead power lines, wind power, high voltage measuring system.

In this research, lightning surges are calculated using FDTD method and compared with the corresponding measured results.



### Available Facilities and Equipment

High-Speed PCs	
FORTRAN Software	