The Earth's Electric Field: Sources From Sun to Mud

by
Michael C. Kelley





Synopsis

The Earth's Electric Field provides you with an integrated and comprehensive picture of the generation of the terrestrial electric fields, their dynamics and how they couple/propagate through the medium. The Earth's Electric Field provides basic principles of terrestrial electric field related topics, but also a critical summary of electric field related observations and their significance to the various related phenomena in the atmosphere. For the first time, Kelley brings together information on this topic in a coherent way, making it easy to gain a broad overview of the critical processes in an efficient way. If you conduct research in atmospheric science, physics, atmospheric chemistry, space plasma physics, and solar terrestrial physics, you will find this book to be essential reading. The only book on the physics of terrestrial electric fields and their generation mechanisms, propagation and dynamics—making it essential reading for scientists conducting research in upper atmospheric, ionospheric, magnetospheric and space weatherCovers the processes related to electric field generation and electric field coupling in the upper atmosphere along with providing new insights about electric fields generated by sources from sun to mudFocuses on real-world implications—covering topics such as space weather, earthquakes, the effect on power grids, and the effect on GPS and communication devices

What people say about this book

GDM, "It's all around us, but we don't know it.. This is a great book. Very informative. Well researched and accurate."