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Sommario/riassunto	Electromagnetic Scintillation describes the phase and amplitude fluctuations imposed on signals that travel through the atmosphere. The volumes that make up Electromagnetic Scintillation will provide a modern reference and comprehensive tutorial, treating both optical and microwave propagation and integrating measurements and predictions at each step of the development. This first volume deals with phase and angle-of-arrival measurement errors, accurately described by geometrical optics. It will be followed by a further volume examining weak scattering. In this book, measured properties of tropospheric and ionospheric irregularities are reviewed first. Electromagnetic fluctuations induced by these irregularities are then estimated for a wide range of applications. The book will be of interest to those working in the resolution of astronomical interferometers and large

single-aperture telescopes, as well as synthetic aperture radars and laser pointing/tracking systems. It is also directly relevant to those working in laser metrology, GPS location accuracy, and terrestrial and satellite communications.