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3.3.2 Theoretical Trends in Cross-Polarized Scattering with Gaussian Correlation
3.3.3 Comparison with Measurements and Simulations; 3.4 ISOTROPIC X-POWER CORRELATION; 3.4.1 Theoretical Trends in Like Polarized Scattering with x-Power Correlation; 3.4.2 Theoretical Trends in Cross-Polarized Scattering with x-Power Correlation; 3.4.3 Comparison with Measurements and Simulations; 3.5 ISOTROPIC X-EXPONENTIAL CORRELATION; 3.5.1 Theoretical Trends in Like Polarized Scattering with x-Exponential Correlation; 3.5.2 Comparison with Measurements; 3.6 ISOTROPIC EXPONENTIAL-LIKE CORRELATION
3.6.1 A Comparison of Spectral Contents
3.6.2 Theoretical Trends in Like Polarized Scattering with Exponential-Like Correlation; 3.6.3 Comparison with Measurements and Simulations; 3.7 DISCUSSION; References; Chapter 4 The IEM-B Surface Backscattering Model; 4.1 INTRODUCTION; 4.2 ISOTROPIC EXPONENTIAL CORRELATION; 4.2.1 Theoretical Trends for Like Polarization with Exponential Correlation; 4.2.2 Comparison with Measurements; 4.3 ISOTROPIC GAUSSIAN CORRELATION; 4.3.1 Theoretical Trends for Like Polarization with Gaussian Correlation; 4.3.2 Comparison with Measurements and Simulations

Sommario/riassunto

Today, microwave remote sensing has evolved into a valuable and economical tool for a variety of applications. It is used in a wide range of areas, from geological sensing, geographical mapping, and weather monitoring, to GPS positioning, aircraft traffic, and mapping of oil pollution over the sea surface. This unique resource provides microwave remote sensing professionals with practical scattering and emission data models that represent the interaction between electromagnetic waves and a scene on the Earth surface in the microwave region. The book helps engineers understand and apply these models to their specific work in the field. CD-ROM Included! Contains Mathematica code for all the scattering and emission models presented the book, so practitioners can easily use the models for their own applications.
