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Titolo	Geospatial technologies for crops and soils / / Tarik Mitran, Ram Swaroop Meena, Abhishek Chakraborty, editors
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ISBN	981-15-6864-2
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XVI, 521 p. 110 illus., 79 illus. in color.)
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Soggetti	Crops - Remote sensing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Geospatial Technologies for Crops and Soils: An Overview -- Chapter 2. Remote Sensing and Geographic Information System: A Tool for Precision Farming -- Chapter 3. Retrieval of Crop Biophysical Parameters Using Remote Sensing.-Chapter 4. Spatialization of Crop Growth Simulation Model Using Remote Sensing -- Chapter 5. Crop Monitoring through Microwave Remote Sensing -- Chapter 6. Crop Production Estimation Using Remote Sensing -- Chapter 7. Concepts and Applications of Chlorophyll Fluorescence: A Remote Sensing Perspective -- Chapter 8. Point and Imaging Spectroscopy in the Geospatial Analysis of Soils -- Chapter 9. Digital Soil Mapping: The Future Need for Sustainable Soil Management -- Chapter 10. Soil Moisture Retrieval Techniques Using Satellite Remote Sensing -- Chapter 11. Geospatial Modeling for Soil Quality Assessment -- Chapter 12. Land Degradation Assessment Using Geospatial Techniques -- Chapter 13. Groundwater Management for Irrigated Agriculture through Geospatial Techniques -- Chapter 14. Assessing Urban Sprawl Impact on Agricultural Land using Geospatial Techniques. .
Sommario/riassunto	The sustainable development of the agriculture sector is the only option to meet the demands of increased and economically viable production in a changing climate. This means there is a need to introduce the latest technologies to enhance production, and also help policymakers make decisions for the future. Geospatial technologies &

tools, such as remote sensing, geographical information systems (GIS), global positioning systems (GPS), and mobile & web applications, provide unique capabilities to analyze multi-scale, multi-temporal datasets, and support decision-making in sustainable agriculture development and natural resources management. Further, the availability of reliable and timely geospatial information on natural resources and environmental conditions is essential for sustainable agricultural development and food security. Since remote sensing solutions are fast, non-destructive and have large spatial coverage, they can play a significant role in the identification, inventory, and mapping of land resources. Over the past four decades, remote sensing has proved to be a cost-effective and powerful tool to assess crop and soil properties in varying spatial and temporal scales using both visual and digital techniques. Satellite remote sensing coupled with GIS & mobile-app based positional information has emerged as an efficient tool for optimizing input resources, and minimizing cost of production and risk of biotic/ abiotic factors nature to promote sustainable agriculture. This book comprehensively documents the applications of space-based technologies for crop and soil assessments for the sustainable development of agriculture.

2. Record Nr. UNINA9910140611403321

Autore	Xekalaki Evdokia
Titolo	ARCH models for financial applications [[electronic resource] /] / Evdokia Xekalaki, Stavros Degiannakis
Pubbl/distr/stampa	Chichester ; ; Hoboken, : John Wiley & Sons, 2010
ISBN	1-282-54774-7 9786612547744 0-470-68801-7 0-470-68802-5
Descrizione fisica	1 online resource (560 p.)
Altri autori (Persone)	DegiannakisStavros
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Soggetti	Finance - Mathematical models Autoregression (Statistics)
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Formato	Materiale a stampa
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Nota di contenuto	ARCH Models for Financial Applications; Contents; Preface; Notation; 1 What is an ARCH process?; 1.1 Introduction; 1.2 The autoregressive conditionally heteroscedastic process; 1.3 The leverage effect; 1.4 The non-trading period effect; 1.5 The non-synchronous trading effect; 1.6 The relationship between conditional variance and conditional mean; 1.6.1 The ARCH in mean model; 1.6.2 Volatility and serial correlation; 2 ARCH volatility specifications; 2.1 Model specifications; 2.2 Methods of estimation; 2.2.1 Maximum likelihood estimation; 2.2.2 Numerical estimation algorithms 2.2.3 Quasi-maximum likelihood estimation2.2.4 Other estimation methods; 2.3 Estimating the GARCH model with EViews 6: an empirical example; 2.4 Asymmetric conditional volatility specifications; 2.5 Simulating ARCH models using EViews; 2.6 Estimating asymmetric ARCH models with G@RCH 4.2 OxMetrics: an empirical example; 2.7 Misspecification tests; 2.7.1 The Box-Pierce and Ljung-Box Q statistics; 2.7.2 Tse's residual based diagnostic test for conditional heteroscedasticity; 2.7.3 Engle's Lagrange multiplier test; 2.7.4 Engle and Ng's sign bias tests

2.7.5 The Breusch-Pagan, Godfrey, Glejser, Harvey and White tests2.7.6 The Wald, likelihood ratio and Lagrange multiplier tests; 2.8 Other ARCH volatility specifications; 2.8.1 Regime-switching ARCH models; 2.8.2 Extended ARCH models; 2.9 Other methods of volatility modelling; 2.10 Interpretation of the ARCH process; Appendix; 3 Fractionally integrated ARCH models; 3.1 Fractionally integrated ARCH model specifications; 3.2 Estimating fractionally integrated ARCH models using G@RCH 4.2 OxMetrics: an empirical example
3.3 A more detailed investigation of the normality of the standardized residuals: goodness-of-fit tests3.3.1 EDF tests; 3.3.2 Chi-square tests; 3.3.3 QQ plots; 3.3.4 Goodness-of-fit tests using EViews and G@RCH; Appendix; 4 Volatility forecasting: an empirical example using EViews 6; 4.1 One-step-ahead volatility forecasting; 4.2 Ten-step-ahead volatility forecasting; Appendix; 5 Other distributional assumptions; 5.1 Non-normally distributed standardized innovations
5.2 Estimating ARCH models with non-normally distributed standardized innovations using G@RCH 4.2 OxMetrics: an empirical example5.3 Estimating ARCH models with non-normally distributed standardized innovations using EViews 6: an empirical example; 5.4 Estimating ARCH models with non-normally distributed standardized innovations using EViews 6: the logl object; Appendix; 6 Volatility forecasting: an empirical example using G@RCH Ox; Appendix; 7 Intraday realized volatility models; 7.1 Realized volatility; 7.2 Intraday volatility models
7.3 Intraday realized volatility andARFIMAXmodels in G@RCH 4.2 OxMetrics: an empirical example

Sommario/riassunto

Autoregressive Conditional Heteroskedastic (ARCH) processes are used in finance to model asset price volatility over time. This book introduces both the theory and applications of ARCH models and provides the basic theoretical and empirical background, before proceeding to more advanced issues and applications. The Authors provide coverage of the recent developments in ARCH modelling which can be implemented using econometric software, model construction, fitting and forecasting and model evaluation and selection. Key Features:Presents a comprehensive overview of both t