

1. Record Nr.	UNINA9910953942603321
Titolo	Efficient algorithms of time series processing and their applications // G. Sh. Tsitsiashvili, editor
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2009
ISBN	1-61728-387-8
Edizione	[1st ed.]
Descrizione fisica	1 online resource (109 p.)
Altri autori (Persone)	TSitsiashviliG. Sh (Gurami Shalvovich)
Disciplina	519.5/5
Soggetti	Time-series analysis Algorithms
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- EFFICIENT ALGORITHMS OF TIME SERIES PROCESSING AND THEIR APPLICATIONS -- EFFICIENT ALGORITHMS OF TIME SERIES PROCESSING AND THEIR APPLICATIONS -- CONTENTS -- PREFACE -- Chapter 1. INTRA-ANNUAL BUNDLES OF CLIMATIC PARAMETERS -- ABSTRACT -- INTRODUCTION -- 1. DATA -- 2. METHODS INVESTIGATION -- 3. DISCUSSION OF RESULTS -- CONCLUSION -- REFERENCES -- Chapter 2. APPLICATION OF EXPERIENCE METHOD OF THE RECOGNITION BY INTERVAL FOR MAKING PROGNOSIS ON THE TATAR STRAIT(JAPAN SEA) ICE-COVER EXTREMITY -- ABSTRACT -- INTRODUCTION -- 1. DATA AND METHODS OF EXPLORATION -- 2. PECULIARITIES OF THE ATMOSPHERIC PROCESSES THAT PROVIDE FORMATION OF ANOMALOUS ICE COVER IN THE TATAR STRAIT -- 3. RESULTS OF CALCULATIONS -- CONCLUSION -- REFERENCES -- Chapter 3. FACTOR TEMPORAL PROGNOSIS OF CRITICAL LEVELS OF HUMAN INFECTION RATE -- REFERENCES -- Chapter 4 SPACE-TIME PROGNOSIS OF TICK-BORNE ENCEPHALITIS FOCI FUNCTIONING -- REFERENCES -- Chapter 5. SYSTEM APPROACH IN DEMOGRAPHIC INVESTIGATIONS -- ABSTRACT -- MORTALITY IN PRIMORSKIY KRAY DEPENDING ON AGE -- REFERENCES -- Chapter 6. THE DETERMINATION OF FIXITY FACTORS IN DYNAMIC RISE OF CITIES -- ABSTRACT -- REFERENCES -- Chapter 7. EXPLORATION OF VARIABILITY IN THE ABOVE-EARTH AIR TEMPERATURE OVER THE FAR EAST REGIONS BY THE METHOD OF RESIDUAL VARIABILITY OF TEMPORAL ROW -- ABSTRACT

Sommario/riassunto

This new book presents works on processing time series of observations in problems of meteorology, ichthyology, medical geography, epidemiology and demography. These works have been published by the authors within the last 4 years in the Russian journals and reported at various Russian and international conferences. The basic methods of processing of time series in the collected works are developed algorithms for: *recognition of images, *classifications, *estimations of dispersions of fluctuations concerning a trend. The idea of construction of the first two algorithms consists in studying large outliers in time series. Such approach has allowed to construct quite simple for understanding and rather fast, as to computing, algorithms of recognition of images and classifications and to apply them in the problems that are characterized by large volumes of empirical information. The third of the specified algorithms is based on special transformations of time series to problems with a small trend and greater fluctuations. Application of traditional algorithms in the considered arrays of the empirical information demands complex calculations. The problems described in presented works, are actual and that's why the using in them of the offered algorithms carries not illustrative, but substantial character. The problems in question: *influence of meteorological factors on critical values: catch of fish (hunchback salmon) in the Amur river, freezing in the Tatar strait, numbers infected by tick-borne [vernal] encephalitis and other epidemic diseases in Primorye Territory, *influence of economic transformations on various age groups of the population and on dynamics of a population in cities of the Primorye Territory, *influence of global warming on fluctuations of surface temperature in various areas of the Far East.
