Special Issue

Chaotic Dynamics of Environmental and Hydrological Time Series

Message from the Guest Editor

The basic objective of time series analysis is to understand the characteristics of the processes that generate the time series and to make future predictions as well as simulations under different scenarios. Such systems exhibit stable properties which are predictable at times but become "chaotic" under certain initial conditions. The first step in the analysis of chaotic dynamics is to establish whether a time series is in fact generated from a chaotic deterministic system which is done by estimating certain invariant measures such as the correlation dimension, Lyapunov exponent, Kolmogorov-Sinai (KS) entropy, capacity dimension, topological dimension, fractal dimension, Hausdorff dimension etc. This special edition on Chaotic Dynamics of Environmental and Hydrological Time Series aims to bring together latest developments in the understanding of chaotic dynamics with particular reference to prediction of environmental an hydrological time series. Dr. Jayawardena Amithirigala W.

Guest Editor

Dr. Amithirigala Widhanelage Jayawardena Department of Civil Engineering, The University of Hong Kong, Pokfulam, Hong Kong, China

Deadline for manuscript submissions

closed (20 February 2022)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/91829

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/ applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



<u>applsci</u>



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)