Accepted Manuscript

Spatial distribution of the daily precipitation concentration index in Southern Russia



Elena Vyshkvarkova, Elena Voskresenskaya, Javier Martin-Vide

S0169-8095(17)30883-9
doi:10.1016/j.atmosres.2017.12.003
ATMOS 4139
Atmospheric Research
15 August 2017
5 December 2017
5 December 2017

Please cite this article as: Elena Vyshkvarkova, Elena Voskresenskaya, Javier Martin-Vide, Spatial distribution of the daily precipitation concentration index in Southern Russia. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Atmos(2017), doi:10.1016/j.atmosres.2017.12.003

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Spatial distribution of the daily precipitation concentration index in Southern Russia

Elena Vyshkvarkova¹, Elena Voskresenskaya¹, Javier Martin-Vide²

¹ Federal state budgetary scientific institution "Institute of natural and technical systems", Lenin St., 28, Sevastopol, 299011, Russian Federation

² University of Barcelona, Montalegre, 6, Barcelona, 08001, Spain

Corresponding author: aveiro_7@mail.ru (E. Vyshkvarkova),

Abstract

The territory of Southern Russia presents a great diversity of climates and complex orography that lead to a very different precipitation distribution. Annual precipitation amounts differ between 222 mm in the coast of the Caspian Sea and more than 2,000 mm in the highest parts of the Caucasus Mountains. In order to investigate the statistical structure of daily precipitation across the study region the daily precipitation Concentration Index (CI) was used. In present paper, the CI was calculated for 42 meteorological stations during the 1970–2010 period. The analysis of precipitation concentration identified that the distribution of daily precipitation is more regular over the west, north and south regions compared to the east (the Caspian Sea coast and the Caspian Depression). The Crimean peninsula is characterized by low CI values in the north and high values in the eastern part.

Keywords: Concentration Index, daily precipitation, Southern Russia.

Download English Version:

https://daneshyari.com/en/article/8864744

Download Persian Version:

https://daneshyari.com/article/8864744

Daneshyari.com