



**"Gheorghe Asachi" Technical University of Iasi, Romania**



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## PRECIPITATION REGIMES IN KIZILIRMAK BASIN, TURKEY

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### Abstract

Changing precipitation patterns and greater variations in precipitation cause flooding and flash flooding. Considering the future scenarios, it is predicted that the number and severity of floods and flood disasters will increase. The annual precipitation concentration and the temporal trend of precipitation concentration of the Kizilirmak Basin in Turkey were investigated. In addition, evaluations were made in terms of public administration against climate change and possible disasters. Precipitation Concentration Index (PCI) and Innovative Trend Analysis (ITA) were used with precipitation records for the period 1976-2017 in the Kizilirmak Basin. The results show a moderate precipitation regime at Kizilirmak Basin. According to ITA results, no significant trends were found at the 0.05 significance level. However, insignificant negative trends and positive trends were detected for PCI. It should not be forgotten that there will be changes in the frequency and severity of disasters such as floods and droughts, in which regions with irregular precipitation regimes are determined in the future. Within the scope of the modern disaster management approach, it is necessary to make preparations for reducing risks and damages and to raise awareness about disasters.

**Key words:** climate change, disaster, disaster management, precipitation, precipitation regime

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**RETRACTED PAPER:**  
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**Reasoning for Retraction of the paper titled *Precipitation regimes in Kizilirmak Basin, Turkey*, authors Utku Zeybekoglu, Fatma Gunduz, that was published in *Environmental Engineering and Management Journal*, volume 22, issue 11, pages 1901-1912**

This article was retracted by the Editor-in-Chief at the request of the Corresponding author on behalf of all authors of the paper.

In an email addressed to the Editor-in-Chief on Tuesday, January 30, 2024, the Corresponding author justified this decision as follows:

*We have recently become aware of significant errors and inaccuracies in the data and methodology presented in the paper. After a thorough investigation, we have determined that these errors undermine the validity and reliability of the results and conclusions reported in the article. It is our ethical responsibility to address these issues promptly and transparently by retracting the paper from the scientific literature.*

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*The mistake was identified during an internal audit, and despite our best efforts, we are unable to rectify the errors or reproduce the findings as originally reported. We deeply regret any confusion or misunderstanding that may have arisen as a result of these inaccuracies.*

*We understand the importance of maintaining the integrity and credibility of scientific research, and we believe that retraction is the appropriate course of action in this case. By retracting the paper, we aim to uphold the principles of transparency, accuracy, and accountability in scientific publishing.*

*We apologize to the readership, the journal, and the scientific community for any inconvenience or harm caused by the publication of this flawed article. We assure you that this incident has prompted us to review and strengthen our internal quality control procedures to prevent similar issues in the future.*

*We kindly request that the retraction notice be published in an upcoming issue of Environmental Engineering and Management Journal, clearly stating that the article has been officially retracted due to significant errors. We are available to provide any additional information or clarification that may be required for the retraction process.*

*This issue is of vital importance for authors.*

*We expect your cooperation in this regard.*

*We apologize to the editorial board for this situation.*

*Thank you for your understanding and cooperation in handling this matter.*

*We deeply regret the need for this retraction, and we appreciate your assistance in resolving it promptly.*

**The Editor-in-Chief of Environmental Engineering and Management Journal would like to extend the deepest apologies to the readers of the journal for any inconvenience that may have arisen from the publication of this article. We are grateful for the efforts and support of the Editorial board, reviewers, and readers who aided in the evaluation of this article.**

**The authors have been informed of a three-year ban on publishing in our journal.**