



## **First super-high-resolution modeling study that the ancient "Fertile Crescent" will disappear in this century and comparison to regional climate models**

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**The first full projections of rainfall and streamflow in the "Fertile Crescent" in Middle East at the end of this century is presented in this paper. This has not been possible earlier due to lack of observed data and lack of atmospheric models with sufficient resolution. An innovative super-high-resolution (20-km) global climate model is employed, which reproduces very well the precipitation and the streamflow of the present-day Fertile Crescent. It is projected that, by the end of this century, the Fertile Crescent will lose its current shape or virtually disappear. The annual discharge for the Euphrates River will decrease significantly (29–73%), and the streamflow in the Jordan River will almost disappear.**

**Comparisons with other regional climate modeling results performed at Tel-Aviv University, are presented.**

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