Correlation and Regression Hadley Circulation and Atmospheric Components with Atmosphere Droughts in IRAN

Seyyed mahmoud Hosseini seddigh [1]

masoud jalali [2]

Hossein Asakereh [3]

[1] Doctoral student of hydrology and meteorology, Zanjan University, Zanjan, Iran

[2] Assistant Professor of Climatology, Department of Geography, Zanjan University, Zanjan, Iran

[3] Professor of Climatology, Department of Geography, Zanjan University, Zanjan, Iran

Introduction

The results of the study showed that the correlation headley cell and subtropical jet on the atmosphere Iran at the level 200 hPa has a positive correlation with a value of 0.4-0.7 to 35 ° latitude and also regression analysis showed that in latitudes between 15 35 degrees north of the subtropical jet 1(m/s) is higher than normal, although in 2017 up to latitudes 30 degrees north showed an increase of 2(m/s), which had a negative effect on rainfall.

Data and Method

The relationship between Hadley cell and olr in the southern, southwestern and southeastern regions of Iran with a value of 0.4 and the Zagros and northwestern heights of Iran with a value of 0.7 and regression with a value of (w/m2) 0.01 more than normal.

Results and Discussion

It acts as a tangible source of heat in the middle Wordspehr and the heat is added directly to the middle Wordspehr and causes heating of the upper half of the Wordspehr.

Conclusion

Regression 2 to 1 is shown. Low relative humidity along with the dried air mass is located below the descending branches of the headley cell, which has ruled the drought conditions (-0/7) showed that it creates conditions for lack of rainfall and drought.

Key Words: Hadley Cell,Temporal correlation and regression, Atmospheric components, Drought

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