**Statement of the problem**

Today, sufficient evidence shows that the phenomena of climate change and global warming have caused serious and extensive problems all over the world and have adversely affected human life and caused a lot of damage to infrastructure. Iran is a very diverse country. In terms of climate, it is mostly formed by mountainous, dry and semi-arid regions, therefore, the weather conditions are fragile and have high spatial variability, on the basis of which, the application of the dynamic microrotation method can better justify the climate and temperature behavior of Iran, and also By reviewing the researches done due to the importance of studying pressure changes and the lack of researches that have dealt with pressure modeling and evaluation of its anomaly with dynamic downscaling methods, this research aims to evaluate dynamic models and to investigate the effectiveness of the updated dynamic microrotation method as well as to evaluate seasonal pressure anomaly. Iran has paid based on the use of CORDEX micro-turning method.

 **Research Methods**

First, the data of 36 synoptic stations during the statistical period (1960-2005), the data of the HadGEM2-ES model adjusted using the CORDEX model and RCPs scenarios for two historical periods (1960-2005) and predicted for three near future periods (2011-2040) ), the middle future (2041-2070) and the far future (2071-2099) were used. Six methods of R2, MAE, MBE, RMSE, t-Jacovides and t-Jacovides/R2 ratio were used to evaluate the efficiency of the model. These meteorological stations are scattered in all the provinces of the country and have a suitable spatial distribution, for this purpose the longitude, latitude and altitude of each station were used for selection. The lowest summit point is Babolsar with -21 meters and the highest is Kerman summit with 1753 meters.

**Description and interpretation of results**

With the aim of evaluating dynamic models and then selecting the appropriate model, this research investigated CORDEX's dynamic inversion method to transform Iran's seasonal pressure anomaly based on the HadGEM2-E model. The model was run for the historical period (1960-2005) and future projections (2011-2099) under three radiative forcing scenarios (RCP2.6, RCP4.5 and RCP8.5). In the next step, the model data were divided into three periods of the near future (2011-2040), the middle future (2041-2070) and the far future (2071-2099) in order to better evaluate the effects of pressure anomalies in Iran. The results of the efficiency of CMIP5 models in estimating sea level pressure under the CORDEX dynamic microrotation method in Iran with the data of 36 Hamdid stations showed that the HadGEM2-ES model. The validation results of the modeled data showed that the HadGEM2-ES model has a good ability to simulate SLP. Is. So that the RMSE values ​​are less than 4 millibars in the low-lying areas such as the coastal areas of the Caspian Sea (Babolsar, Ramsar, Rasht, Gorgan stations) and Bojnord, Bandar Abbas, Bushehr, Chabahar, Ahvaz and Abadan, indicating the high accuracy of the simulated data. High and mountainous areas, including the stations adjacent to the Zagros mountain range, such as Hamedan and Kermanshah, in the northwest of Tabriz, Urmia, Khoy, and in the central regions of Iran, such as Kerman and Yazd, the model did not provide adequate accuracy, and also among the reasons for the increase in the maximum value of RMSE The distance between the station and the nearest cell is 1008-1030 mbar respectively, the minimum and maximum pressure during the winter season; The average maximum pressure with the spatial pattern of roughness changes corresponds to the Alborz and Zagros mountain ranges and the Himalayan heights. The minimum pressure pattern of the winter season also covers the entire low-lying areas of the southern half, the Khuzestan plain, the southeast, the central areas and the Lut Plain, as well as the water areas of the Indian Ocean, the Arabian Sea, and the Red Sea. According to the RCP2.6 scenario, the pressure anomaly in The near future was 1.46, the middle future was 2.26 and the far future was 2.40 millibars. The minimum pressure anomaly compared to the observation period in the near, middle and far future was -21.1, -0.75 and -96 millibars during each Three periods of time correspond to seas and oceans, including the Black Sea, the Red Sea, and the Indian Ocean. The RCP4.5 scenario, which depicts the forecast of intermediate conditions, is the same as the RCP2.6 scenario, with maximum pressure variability in all three time periods in the Central Asian regions based on altitudes, including the Himalayan mountain range and the Hindu Kush highlands, as well as the Siberian thermal high pressure pattern. , the pattern of low pressure of Sindh and dynamic high pressure of Saudi Arabia is located

**Key words**: pressure anomaly, CMIP5 models, CORDEX microcirculation model, RCPs scenarios, Iran.