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## Assessment of sea surface temperature variations in Northern hemisphere

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This paper aimed to study the SST in the Northern Hemisphere between 1948-2013 years based on NCEP/NCAR reanalysis data. The study area is the range of latitudes 55° to 75° N and longitude of 40° W to 70° E. The results showed that there are 4 temperature regimes in the study area (1948-1963, 1964-1986, 1987-1996, 1997-2013) this period can be divided into two larger periods (colder period (1948-1994) and the warmer period (1995-2013). The annual average of SST in the colder period (1948-1994) have been -0.13 ° C below the average of the whole study period, while in the warmer period (1995-2013), it has raised to 0.31 ° C higher than the average. Thus, the SST increased in the second period by 0.44 ° C. In the study period, the year of 2010 and 2006 respectively with the amount of 0.52 and 0.43 ° C higher than the average of the

entire study period was the warmest, and the year of 1974 and 1986, respectively with the amount of -0.34 and -0.31 ° C lower the average of the entire study period was the coldest years. The months of Aug and Oct had the highest temperature variation, so that from 1948 to 1994, the temperature of these two months was -0.15 ° C less than the average of whole period, and then from 1995 to 2013 respectively changed to 0.38 and 0.37 ° C higher than the average of study period. The months of Feb and Mar had the lowest temperature variation, so that from 1948 to 1994, the temperature of these two months were respectively -0.11 and -0.10 ° C less than the average of whole period, and then from 1995 to 2013 respectively changed to 0.36 and 0.35 ° C higher than the average of study period.

## Biography

Iman Roustae has completed his PhD from Tehran University, Tehran-Iran. His PhD thesis has been performed in Climate Change and Atmospheric Blocking. He is currently the Assistant Professor of Climatology at the Dept. of Geography, Yazd University. He has published more than 20 papers in reputed journals. The details of his research interests and activities are available in Google scholar.

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