## World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:13, No:04, 2019

## Statistical Scientific Investigation of Popular Cultural Heritage in the Relationship between Astronomy and Weather Conditions in the State of Kuwait

Authors: Ahmed M. AlHasem

**Abstract :** The Kuwaiti society has long been aware of climatic changes and their annual dates and trying to link them to astronomy in an attempt to forecast the future weather conditions. The reason for this concern is that many of the economic, social and living activities of the society depend deeply on the nature of the weather conditions directly and indirectly. In other words, Kuwaiti society, like the case of many human societies, has in the past tried to predict climatic conditions by linking them to astronomy or popular statements to indicate the timing of climate changes. Accordingly, this study was devoted to scientific investigation based on the statistical analysis of climatic data to show the accuracy and compatibility of some of the most important elements of the cultural heritage in relation to climate change and to relate it scientifically to precise climatic measurements for decades. The research has been divided into 10 topics, each topic has been focused on one legacy, whether by linking climate changes to the appearance/disappearance of star or a popular statement inherited through generations, through explain the nature and timing and thereby statistical analysis to indicate the proportion of accuracy based on official climatic data since 1962. The study's conclusion is that the relationship is weak and, in some cases, non-existent between the popular heritage and the actual climatic data. Therefore, it does not have a dependable relationship and a reliable scientific prediction between both the popular heritage and the forecast of weather conditions.

**Keywords:** astronomy, cultural heritage, statistical analysis, weather prediction **Conference Title:** ICSC 2019: International Conference on Statistics for Climatology

**Conference Location :** Lisbon, Portugal **Conference Dates :** April 16-17, 2019