

Multitemporal Satellite Images for Agriculture Change Detection in Al Jouf Region, Saudi Arabia

Authors : Ali A. Aldosari

Abstract : Change detection of Earth surface features is extremely important for better understanding of our environment in order to promote better decision making. Al-Jawf is remarkable for its abundant agricultural water where there is fertile agricultural land due largely to underground water. As result, this region has large areas of cultivation of dates, olives and fruits trees as well as other agricultural products such as Alfa Alfa and wheat. However this agricultural area was declined due to the reduction of government supports in the last decade. This reduction was not officially recorded or measured in this region at large scale or governorate level. Remote sensing data are primary sources extensively used for change detection in agriculture applications. This study is applied the technology of GIS and used the Normalized Difference Vegetation Index (NDVI) which can be used to measure and analyze the spatial and temporal changes in the agriculture areas in the Aljouf region.

Keywords : spatial analysis, geographical information system, change detection

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020