

5th International Conference on **GIS and Remote Sensing**

September 16-17, 2019 | Rome, Italy

Analyzing the spatio-temporal vegetation dynamics in Iceland by using remote sensingIman Roustaei¹, Haraldur Olafsson² and Hao Zhang³Yazd University, Iran¹University of Iceland, Iran²Fudan University, China³

In this study spatio-temporal variations of NDVI (Normalized Difference Vegetation Index) in Iceland were investigated over the period 2001–2018 by using MODIS/Terra (MOD13Q1.006__250m_16_days) images. The results show that dense vegetation (NDVI 0.6-0.8) in 2018 in the study area is increasing in terms of Length of Growing Period (LGP) as well as the extent of covered area in comparison with 2001. As the LGP of this type of vegetation in 2001 began from the third decade of April and reached its maximum expansion of 259 km² in the second half of July to mid-August, and then its descent began. While the LGP of this vegetation in 2018 began from the first decade of April and reached its peak expanding (305 square kilometers) continued until late August. This case also applies to very dense vegetation cover (NDVI > 0.8), so that the LGP of this vegetation in 2001 began in late May and reached its maximum expansion (23 km²) in the second half of July to mid-August and then its descent has begun. While in 2018 LGP of this vegetation began from the first decade of April and its peak expanding (54 km²) continued until mid-August. So, it seems that, the dense vegetation coverings are increasing in the LGP and the area covered. But the covered area of semi-dense vegetation (0.4-0.6 NDVI) as well as sparse vegetation (NDVI 0.2-0.4) in 2018 has been decreasing rather than 2001.

Biography

Iman Roustaei has completed his PhD from University of Tehran, Tehran-Iran. His PhD thesis has been performed in Climate Change and Atmospheric Blocking. He is currently assistant Professor of Climatology at the Dept. of Geography, Yazd University, Yazd-Iran. He has published more than 25 papers in reputed journals.

Notes: