*** Change Detection in a Rural Landscape: A case study of processes and main driving factors and its response to land surface temperature and heat island phenomenon in Farim, Iran***

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General Introduction

 This dataset contains data collected for the research article that its doi will be added to this dataset after publishing it.

The authors from Shahid Beheshti University and the Indian Institute of Technology collected the data between 2019 and 2022, and there was no grant.

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Purpose of the study

 This study investigates the alteration of land use land cover (LULC) change and its response to change in land surface temperature (LST) and heat island phenomena of a rural district of Farim in the north of Iran from 1990 to 2020 using multi-date Landsat data. The urban thermal field variance index (UTFVI) shows the most vital zone in the central area and no UTFVI zone in the surrounding region.

The data used in the analysis has been uploaded separately in the zip format with these names: "LST.zip," "LULC.zip," and "UTFVI_zones.zip."

There is also an excel file containing the Landuse/cover change detection results: "Result.xlsx."

The data was derived by the Google Earth Engine (GEE), and its statistics analysis was done in the ArcGIS software.