



## **Analysis of Land Surface Temperature based on NDVI in Basavana Bagewadi**

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**Abstract:** The present study is carried out in Basavana Bagewadi taluk of Bijapur district, which is well known for experiencing fluctuations in temperature over years. Comparison of LST derived from Landsat with respect to NDVI and MODIS LST data for 12 years (2005 to 2017), is carried out in the present study. Based on the study, it is found that the region experiences hot climatic conditions during summer with the mean temperature of 40°C. Comparison of the LST obtained from Landsat and MODIS datasets experiences a variation of 5°C to 7°C with the considered data products. The variation experienced is due to the comparison of finer and coarser resolution products.

**Keywords:** Land surface temperature, NDVI, MODIS, Emissivity

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