

RINGKASAN

Riska Ayu Nurmala, *Urban and Regional Planning Department, Faculty of Engineering, Brawijaya University, July 2018, The Identification of Spatial Patterns to Temperature in Batu City, Supervisor: Dr. Eng. Turniningtyas Ayu Rachmawati, ST., MT. and Aris Subagiyo, ST., MT.*

Along with the increasing number of the population every year, so the need to develop a new land-use is also increasing. Changing land can also lead to reduced vegetation, environmental damage and rising temperatures. Air temperature changes were also experienced by Kota Batu, from 2009 to 2016 the temperature of Batu City also experienced an increase of up to 2°C, namely from 21°C to 23 ruling in 2016. Therefore, a study of the spatial pattern at the temperature in Batu City was conducted using the overlay of spatial pattern for temperature and vegetation density, so that it is obtained how the relationship between vegetation density for each spatial pattern and temperature. In the elaboration of each class in each spatial pattern of each sub-district, shows that the higher the temperature, the lower NDVI value indicates that the higher the temperature, the lower the vegetation density and vice versa. However, in each spatial pattern has a different temperature range even though it has several NDVI values that are not much different, this is due to the factors that influence the temperature value of each spatial pattern, which is topography, production of emissions, and CO₂ absorption.

Keywords: Spatial-pattern, temperature, NDVI