

MAPPING OF THERMAL BELTS IN MT. KARIWANG BASED ON FRACTAL ANALYSIS AND LST / DEM DATA

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Abstract: Thermal belt that the cooler air is gathered in gully floor of the valley and the upper slope of gully floor has a high temperature in case daily temperature range appear heavily in the spring and autumn can be good for the health in forest growth as well as pomiculture. This study focused on Mt. Kariwang, calculate surface radiation temperature using the thermal infrared bands of multi-temporal Landsat ETM+ satellite image. And furthermore, thermal belt mapping is performed based on fractal analysis. Thermal belt detection research will contribute to management decision of forest resources to conservation and development for sustainable forest management.

Keywords: Thermal Belt, LST, DEM, NDVI, Fractal Analysis