

## Study on the Introduction Strategy of Heat Island Countermeasures

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The performance of the heat island countermeasure technology by improving the surface cover was sorted out using solar reflectance and evaporative efficiency as indicators. A simple method of integrating the effect of improvement of surface cover, improvement of ventilation, reduction of anthropogenic heat release was developed for evaluating the effect of air temperature reduction on the urban scale using the upper meteorological data. Air temperature distribution on fine summer days in major cities of Japan is strongly affected by sea breeze and tends to rise with the distance from the coast. The radiation environment in the street canyon is dominated by the presence of direct solar radiation, and the priority of measures against heat islands is high in the north side of the east-west road and the center of the north-south road. Because the solar radiation shielding by the street tree occurs on the sidewalk, high reflectance pavement and water retentive pavement are recommended for the roadway and street trees are recommended for the sidewalk. The wind environment in the street canyon is strongly influenced by the open space ratio, so the priority of measures against heat islands is high in building densely areas.