A STUDY ON INFLUENCE OF LAND AND SEA BREEZE ON AIR TEMPERATURE IN HIROSHIMA WIDE AREA IN SUMMER SEASON

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In this study, we analyzed about relationship between sea-land breeze and air temperature in the Hiroshima wide area in a summer season. The summary of the results is shown below.

1) At the time of sea breeze during daytime, sea breeze decreases air temperature rise in the shore, but in the suburbs, sea breeze increases air temperature rise by the movement of the heat generated in the urban region.

2) At the time of the land breeze of night, land breeze reduces air temperature in the Ohta-riverside point, and the reduction effect of temperature was shown also near the mouth of the Ohta-river by development of land breeze.

In this study, we analyzed the difference of the air temperature in the urban area of Hiroshima among calm, sea breeze and land breeze by the observation. The summary of the results is shown below.

1) In the calm period, the air temperature in the urban area rises. However, the air temperature is slightly lower in green belt and around the river. It is caused by the influence the micro-scale climate.

2) In the sea breeze period, the air temperature of urban area lowers inversely as the distance from the coastline. In addition, the air temperature lowers around the river, since it becomes a way of the wind. It is the phenomena of the meso-scale climate.