The Creation of Ultraviolet Distribution Map using Satellite images and Digital Terrain Model

\*Teppei Ishiuchi<sup>1</sup>, Haruka Nakazawa<sup>1</sup>, Ismail Arai<sup>1</sup>

1.National Institute of Technology, Akashi College

Recently, there has been a growing interest in environmental issues in the world. Japan Meteorological Agency publish the UV forecast distribution map. However, it cannot show clearly the situation of ultraviolet amount at local areas. Therefore, this study proposed the method of creating localized ultraviolet distribution map using a high resolution satellite image and digital terrain model. This ultraviolet distribution map is in consideration of the state of the land cover and the shade by trees. In addition, questionnaire survey was conducted about the interest in ultraviolet and Evaluation of ultraviolet distribution map created in this study. As a result, it was indicated that ultraviolet distribution map is effective in promoting of ultraviolet protect.

Keywords: Ultraviolet, Satellite image, Digital terrain model