

Development of Aeolian Dust Index using MODIS data

A.Ito (1,3), J.Miyamoto (1), K.Tsuchiya (2) and T.Ishiyama(3)

(1) Space Engineering Development Co., Ltd., Tokyo, Japan, (2)Hiroshima Earth Environmental Information Center, Hiroshima, Japan, (3) Chiba University, Chiba, Japan

itou.akihiro@sed.co.jp / Fax: +81 43-3857 / Phone:+81 3-3319-6726)

The retrieval of the aeolian dust area from the remote sensing satellite data is comparatively easy over the cloud-free sea, however it becomes difficult over the land. Moreover, it becomes extremely difficult to differentiate the aeolian dust from the clouds in a cloudy area. Taking advantage of a slight difference in the absorptivity and transmissivity of the aeolian dust in the so-called visible and thermal infrared spectra, an attempt is made to develop a method to detect the aeolian dust area. The verification based on the meteorological Synop data indicates a satisfactory result.