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Energy Budget Analysis for the Korean Peninsula in 2016

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In this study, the energy budget for the Korean Peninsula in 2016 was calculated from channel data of geostationary satellite data and meteorological data of numerical weather prediction model. That is, the surface/air temperature, relative humidity, cloud cover of UM LDAPS and shortwave (Ch.1-6) and longwave (Ch.8 and Ch.15) channels of Himawari-8 AHI were used. The calculated energy budget was –2.4, –15.2, and 12.8 Wm^{-2} at the top of the atmosphere, surface, and atmosphere, respectively. The Korean Peninsula regional energy budget showed difference in energy budget between metropolitan (–5.7, –18.5, and 12.8 Wm^{-2}) and urban (–10.3, 2.6, –12.9 Wm^{-2}) areas.