

Comparison of WRF Model-simulated and MODIS-Derived snow coverage over the central mountainous area of Japan

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To solve the lack of meteorological observation data at high altitude area, we compared WRF model-simulated snow depth with MODIS-derived snow cover fraction around the central mountainous area of Japan. We used regional climate model WRF ver3.4 with Noah-Land Surface Model for reproductive experiments. Nested grid system were adopted. The grid intervals were 24 km, 6 km and 2 km, respectively. Time resolution was half a month depend on MODIS-derived snow cover map products.

Keywords: snow coverage, central mountainous area of Japan, numerical experiment, satellite imagery