

AHW017-12

Room: Exhibition hall 7 subroom 3

Time: May 26 12:00-12:15

Variability of evaporation over Lake Kasumigaura:(2) difference between total evaporation of Kasumigaura and measurement

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Evaporation distribution over the Lake Kasumiguara was estimated using satellite data and surface meteorological data. Evaporation was determined by the bulk aerodynamic method, with air temperature and wind speed estimates based on the meteorological stations around Lake Kasumigaura, and surface temperature measured at the central part of the lake from flux observation. This was based on the observation from the surface temperature derived from Landsat-TM or ASTER-satellite sensors that the surface temperature variability was found to be within some 1-2 degC. The resulting evaporation has shown horizontal variability with the annual mean 878 mm/year with standard deviation of 66.4 mm/year. This can be compared with evaporation measured at the central observatory of 976 mm/year.

Keywords: evaporation, boundary layer meteorology, satellite data, spatial interpolation