

Hydrologic changes due to land use changes over the past 100 years within one sub-basin of the Kasumigaura watershed

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A quasi-distributed hydrologic model was applied to a subbasin of the Kasumigaura watershed, the Sonobegawa basin. The model was calibrated against the measured river discharge, with data set of meteorology, hydrology and land use of this basin. The output was treated as the present hydrology. The past hydrology was estimated by the same model, with the same hydrologic and meteorological data but for the land use data of some 100 years ago. The resulting hydrologic difference between the two periods was investigated.