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Comparison with the groundwater storage and the population change

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The Groundwater has outstanding characteristics, in stable quality and quantity. It is used as water resources indispensable for long years. The resources lies underground is depended on local geology. Koshigai et al. (2009) published the depth distribution map for each geological boundary in main plains and basins, and estimated the amount of groundwater storage.
The population and economic activity concentrate in a plain or a basin. A lot of research studies the association between topography and, population or economic activity. We find a positive association between the estimated amount of groundwater storage and population change by nationwide comparison. And the influence of groundwater storage will be large for prediction of the population change, because of deterioration of surface water quality by global warming.
For realization of energy saving and environmental protection policy against global warming, it is required that shortening of a transportation root and dispersal of economic activity. And the importance of the local society and economic activity will become larger. It is thought that the results of the study will contribute the social science and vital statistics for the near future, thus the evaluation of groundwater resources depended on geology should make clear, immediately.

Reference
Masaru KOSHIGAI, Atsunao MARUI, Narimitsu ITO and Takuya YOSHIZAWA, 2009, Estimation of the groundwater storage around main plains and basins in Japanese Islands. Japan association of groundwater hydrology 2009 autumn presentation meeting abstracts, p.118-119.

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