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The impact of savannah vegetation on the spatial and temporal variation of the actual evapotranspiration in the Volta Basin, Navrongo, Upper East Ghana

Evapotranspiration was studied in savannah areas of the Volta Basin using remote sensing data and the Surface Energy Balance Algorithm for Land (SEBAL) model. Land-use and land-cover types, tree density as well as soil moisture distribution were identified as the most important biophysical and hydrological parameters influencing the spatial and temporal variation of evapotranspiration at the beginning and end of the dry season. In future studies, the long-term dynamics of the land cover should be included in the assessment of the hydrological role of savannahs in the Volta Basin.