Spatio-temporal modelling of Vegetation Index using MapReduce and Hadoop

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Aiming at constructing a large-scale spatio-temporal data mining system in the Earth Science field, MapReduce and Hadoop, which is a framework for distributed data system, was examined. Extraction of time series data from a GIMMS dataset (images of vegetation indices) and temporal modeling using logistic function via ML method was implemented on Hadoop and MapReduce and its scalability was examined.

Keywords: data mining, Hadoop, MapReduce, GIMMS