Abstract

The prediction of occurrence of droughts has been a challenging task. However, it is necessary that prediction is done with at most accuracy to prevent loss of life and property. Based on the previous year’s rainfall, temperature and evapotranspiration data, DDI will be calculated which will be based on SPI, SPEI, PDSI, PHDI and ZIND indices. This proposed index will be trained using random forest algorithm and the output will help to predict the severity of drought for the upcoming years. Also, round robin algorithm with dynamic quantum size is used for resource allocation for the victims of drought affected areas.

References

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Index Terms

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Keywords

Drought prediction, rainfall, drought indices, prediction models, resource allocation