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Potential of Four Different Machine-Learning Algorithms in Modeling Daily Global Solar Radiation

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Highlights:

- Global solar radiation is modeled using four machine-learning algorithms.
- Suggested models are compared with new and refitted empirical models.
- Multi-layer perceptron neural network is generally the most accurate algorithm.
- ANFIS, SVM and regression trees are reliable if carefully validated.
- Temperature and day number based models are reliable in modeling radiation.

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