

LOCATION BASE-MONTHWISE ESTIMATION OF PV MODULE POWER OUTPUT BY USING NEURAL NETWORK WHICH OPERATES ON SPATIO-TEMPORAL GIS DATA

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ABSTRACT

This research work focuses on evaluating location specific performance of PV panels for solar energy conversion to electrical energy. The proposed system facilitates plant designer to identify suitable location to improve efficiency of plant to meet energy demands increasing day by day.

The paper illustrate the web based software system that constituted by components such as Neural Network and Google Map Interface. The system use climatic data for specific region, supplied by satellite for training of NN. Then this system evaluates seasonal performance of the PV module at any location within the specific region for which system is trained.

KEYWORDS: Neural Network, Photovoltaic (PV), Nominal Operating Cell Temperature (NOCT), I-V Curve