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Development and Modeling of a Geographic Information Systemsolar Flux Inadrar, Algeria

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***Abstract*—Algeria is one of the important solar belt countries, with an enormous potential in solar energy. The exploitation and promotion of these energy resources offers the opportunity of tackling energy-related and economic challenges, and to contribute to a sustainable development in our countries. The knowledge and assessment of the available solar energy resources is a critical part to renewable energy planning and sizing and can play an important role in lessen the harmful impacts of environmental problems associated with the recovery of fossil fuels and their use in power stations. However, the major handicap has always been the spatial density of radiometric stations which is inadequate. This study aimed to develop solar potential data estimation in Adrar region located in the warm Algerian desert region. The data delivered will be implemented in Geographic Information Systems (GIS) and used as support for Technical analysis of solar potential in this region.**

***Keywords*— Adrar, flow, GIS, deposit, potential.**