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Solar radiometry and forecasting research at UKZN

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Abstract content
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At the UKZN Westville and Howard College campuses there are radiometers (on both campuses) that provide measurements of direct and diffuse irradiance, and a Total Sky Imager (TSI) that produces images of cloud patterns throughout the day. The radiometers are members of SAURAN (Southern African Universities Radiometry Network). Current research is focused on classification of irradiance profiles and solar forecasting using the TSI and other data sources (P. Govender, PhD project), as well as the relationship between irradiance and cloud cover (E. Ganya, MSc project), working together with the other co-authors on this paper. Research thus far has involved performing clustering analysis on irradiance profiles and on analysing TSI images. This paper describes the research plan and reports on current progress.

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