Press release – draft 2

Solar Resource Data for Southern Africa

Six universities from South Africa and one each from Reunion, Botswana, and Namibia are cooperating on the Southern African Universities Radiometric Network or SAURAN. The network consists of 12 radiometric measurement stations in Southern Africa and on the island of Reunion equipped with high resolution instrumentation to measure the solar irradiance as well as other meteorological parameters. The data are made publically available on a website, www.sauran.net, for free download. The main purpose of making the data available is to promote the use of solar energy in SADC countries and to improve the quality of satellite-derived solar data available for the area.

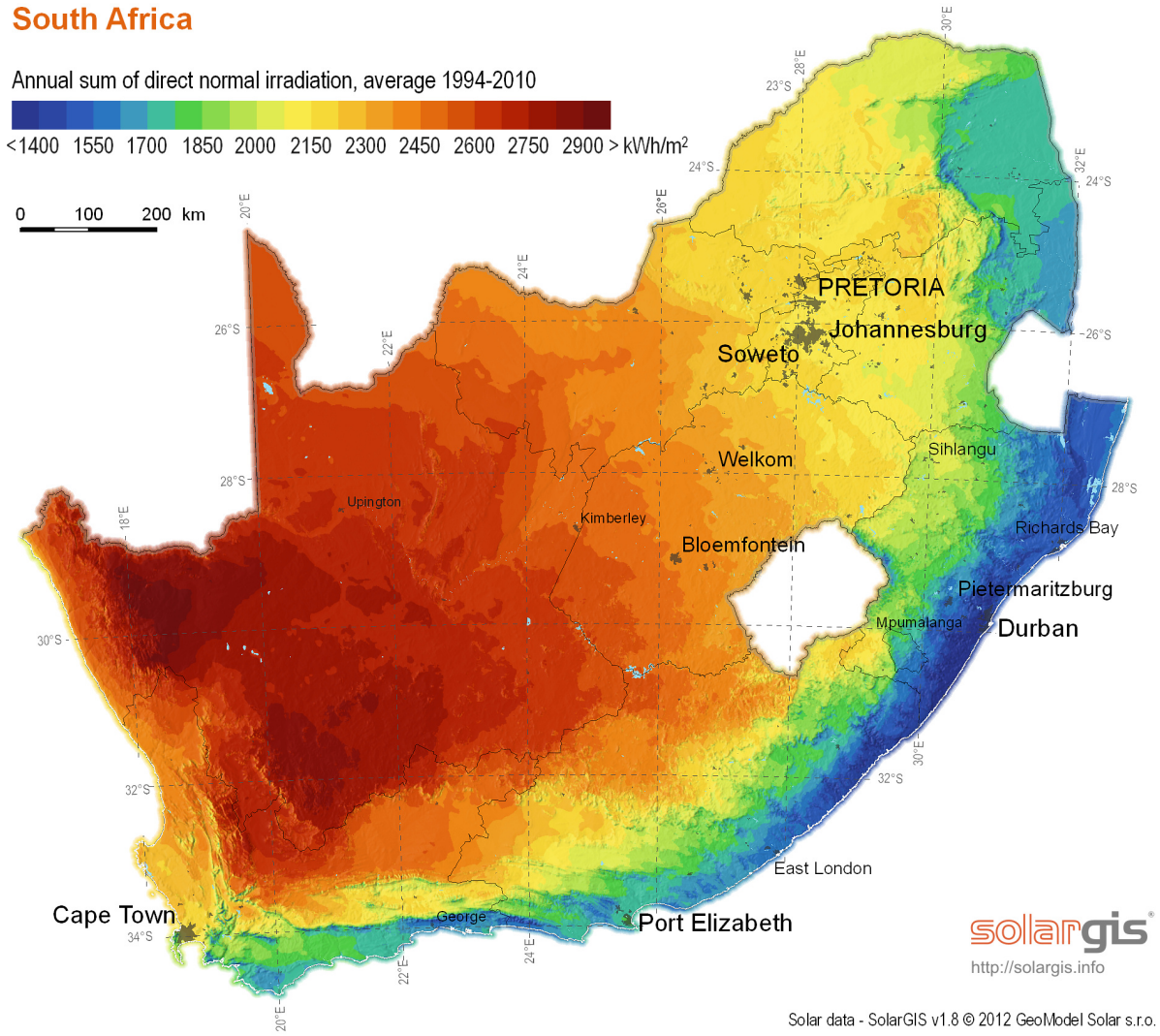
The measurement network was initiated by the Universities of Stellenbosch and KwaZulu-Natal which installed their radiometric stations more than 4 years ago. The network was further extended to Port Elizabeth where Eskom made measurement equipment available at the Nelson Mandela Metropolitan University (NMMU). The stations in Durban were funded by Eskom, the National Research Foundation, the United States Agency for International Development (USAID) and the Norwegian University of Science and Technology, with funding support for the SAURAN initiative coming from the eThekwini Municipality, through their Energy Office. The University of Reunion is presently equipping their station in the city of Le Port through a grant from the European Union. Last year the German Government, through their agency the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), made funding available for another six stations and later another four stations may be added with funding from USAID. The GIZ funding also supported the establishment of the SAURAN website and will fund the development of a newly updated solar map of South Africa.

The purpose of placing the measured data in the public domain is to make it possible for companies and members of the public to obtain accurate, measured solar data in the areas where the stations are deployed. In addition the data will be made available to institutions who predict solar irradiance through satellite imagery to recalibrate their estimation models so that the overall quality of satellite-derived solar data will improve. At present it is possible to obtain solar data for periods of up to 20 years from some of these sources. The accuracy of these satellite-derived data sets can now be verified against the measured solar data.

Prof Wikus van Niekerk, the Director of the Centre for Renewable and Sustainable Studies at Stellenbosch University, said: “This collaboration between the various Southern African universities, sponsored by Eskom, the National Research Foundation and international donor agencies (GIZ and USAID), is an excellent example of what can be achieved with relative little funding but where there is goodwill and a spirit of cooperation between researchers. This SAURAN network will continue to add value to the Southern African solar energy industry and research community for many years to come.”

This project, spearheaded by two of the country’s leading research universities in solar energy, will complement the recently announced South African Solar Energy Atlas project of the Department of Science and Technology with the South African Weather Services where another 12 solar radiation measurement stations will be deployed. This project was recently announced by the Deputy Minister of Science and Technology, Michael Masutha, at the launch of the Droogfontein PV installation.

In the second half of the year Stellenbosch University and the GIZ will release an updated solar map of South Africa that will be based on these and other available measured solar data sets.



A map of Direct Normal Solar Irradiance (DNI) in South Africa (Image provided by GeoModel Solar)

Typical solar radiometric measurement station installed in the Karoo (Image provided by GeoSUN Africa)

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