

# Additional Data Sources for US Solar Data

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## Summary

In some cases, it is possible to improve the statistical confidence in the solar resource by combining data from several sources. This is commonly done in solar site evaluation by combining long-term satellite observations with shorter term ground measurements [1], [2].

Other than [Solar Data Warehouse](#), we are not aware of anyone who can provide quality-controlled, serially complete data from ground observations. There are several sources for good quality solar resource data from satellite models:

The US National Renewable Energy Lab provides the [National Solar Radiation Database](#) (NSRDB) for half hour and hourly solar observations for 1998-2017. There is no cost for the data. Near real-time data is not available.

Free satellite modeled data is also available from [NASA](#) through their POWER project.

[Vaisala \(3TIER\)](#) provides satellite-based solar resource data.

Clean Power Research provides solar resource data through their [SolarAnywhere](#) product.

Several European companies such as [Meteonorm](#) and [SolarGIS](#) also can provide satellite modeled data for the US.

## Sources

[1] Adam Kankiewicz, John Dise, Elynn Wu, Richard Perez 2014. "REDUCING SOLAR PROJECT UNCERTAINTY WITH AN OPTIMIZED RESOURCE ASSESSMENT TUNING METHODOLOGY." 2014 American Solar Energy Society Annual Conference

[2] Richard Meyer, Jesús Torres Butron, Gunnar Marquardt, Marko Schwandt, Norbert Geuder, Carsten Hoyer-Klick, Elke Lorenz, Annette Hammer, Hans Georg Beyer. "Combining Solar Irradiance Measurements and Various Satellite-Derived Products to a Site-Specific Best Estimate".  
[https://uol.de/fileadmin/user\\_upload/physik/ag/ehf/enmet/publications/solar/conference/2008/lasvegas/combining\\_solar\\_irradiance\\_measurements\\_and\\_various\\_satellite\\_derived\\_products\\_to\\_a\\_site\\_specific\\_best\\_estimate.pdf](https://uol.de/fileadmin/user_upload/physik/ag/ehf/enmet/publications/solar/conference/2008/lasvegas/combining_solar_irradiance_measurements_and_various_satellite_derived_products_to_a_site_specific_best_estimate.pdf)