

# Virtual weather data with Solcast

Integrated into PowerTrack, AlsoEnergy provides real-time and forecasted weather information from Solcast, the industry leading provider of solar irradiance and weather data. Leveraging satellite weather, this service provides supplemental data points on solar energy assets for improved accuracy and consistency throughout your entire fleet.



### Insight into asset performance

AlsoEnergy offers two globally available subscription options for the virtual weather data. Forecasted weather data enables predicting expected energy generation in PowerTrack for availability planning, maintenance scheduling, and reporting requirements. Adding real-time virtual weather data enhance expected energy modeling and help maximize asset performance by providing a consistent standard across a fleet or portfolio.

Real-Time data	Forecasted c

5-minute granularity

#### data

- 5-minute granularity refreshed every 4 hours with more frequent updates available
- · Standard, seven-day forecasting, with extended options available

Parameters for both subscriptions are: Global Horizontal Irradiance (GHI), Direct Normal Irradiance (DNI), Diffuse Horizontal Irradiance (DHI), Ambient Temperature, wind speed, snow, and rain

Additional virtual weather integrations available from other 3rd-party providers, such as Solargis and CPR Solar Anywhere, for customers that have existing subscriptions.



Data sheet

#### Improved data accuracy with Solcast weather data



## Solcast real-time and day-ahead GHI data nRMSE (%)

The average normalized root mean squared error (nRMSE) between an on-site pyranometer and Solcast virtual weather for hourly GHI data

Climate Region	Real-Time	+24 hr
Tropical / Subtropical, Arid & Semi-Arid	<b>3.5%</b> (1.6% - 5.9%)	<b>5.6%</b> (3.4% - 9.7%)
Tropical / Subtropical, Humid	<b>3.9%</b> (3.1% - 5.0%)	<b>8.1%</b> (6.1% - 9.4%)
Temperate, Arid & Semi-Arid	<b>4.7%</b> (3.3% - 7.0%)	<b>6.5%</b> (4.8% - 7.8%)
Temperate, Humid	<b>3.6%</b> (2.6% - 4.3%)	<b>7.0%</b> (5.3% - 9.9%)
Average	<b>3.8%</b> (1.6% - 7.0%)	<b>6.7%</b> (3.4% - 9.9%)

Spatial resolution: the model utilizes a two-kilometer grid of local cloud cover which is then downscaled to 150 meter using a terrain grid.

Data from Solcast's Live and Forecast Data Verification and Accuracy Report, March 29, 2022, Nocturnal zeros included