

Analysing Solar School Data

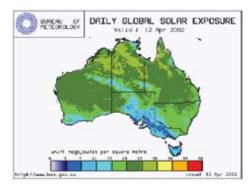
There are a number of schools linked to this website, which send us their generation and other collected data. We can use that data in a number of activities. The interpretation of the data provided is helped by accessing the Australia Meteorological Bureau website (http://www.bom.gov.au), which has excellent maps charts and explanations of weather patterns and data.

What you need:

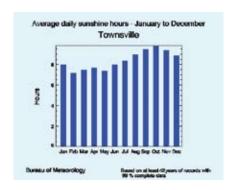
- Internet access on a regular basis to access data from one or more solar schools
- Internet access on a regular basis to access Australian Meteorological Bureau information for the area you are studying.

What you need to do:

- 1. Decide on what data you need to gather. This will depend on whether you are making a study of one school over time or a number of schools spread over a geographic area.
- 2. Access the school(s) data and record the previous days generation output.
- 3. Record data relating to the size of the school(s) system(s) and any other information given.
- 4. Record any general climate information provided by the site.
- 5. Record the geographical position of the school(s) (latitude and distance from the coast).
- Access the Met Bureau's website, and locate the solar radiation map, temperature charts, rainfall charts etc for the region(s) you are studying. http://www.bom.gov.au/sat/solrad.shtml



http://www.bom.gov.au/weather/national/charts/



http://www.bom.gov.au/climate/averages/



For each school you are studying use this information to determine what the general weather conditions were for each day of solar generation data eg sunny, cloudy, partly cloudy, rainy. Produce a table to maintain this information.

School	PV size (kW)	(degrees)	Distance from Coast (km)	Date	Season	Solar Radiation MJ/m²	Average Daily Temp °C	Rainfall (mm)	Weather	PV Output (kW/h)
E.g. A	2	17	20	03/03/03	Summer	26	30	5	Partly Cloudy	8
				04/03/03	Summer	19	28	30	Cloudy	6



Draw a map of Australia or your State and mark the location of the school(s) you are studying.