energy • economics • buildings • environment

Real Time Weather Data

Ersatz Future Climate Data

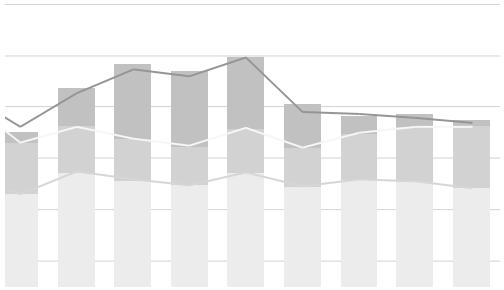
Typical Meteorological Years

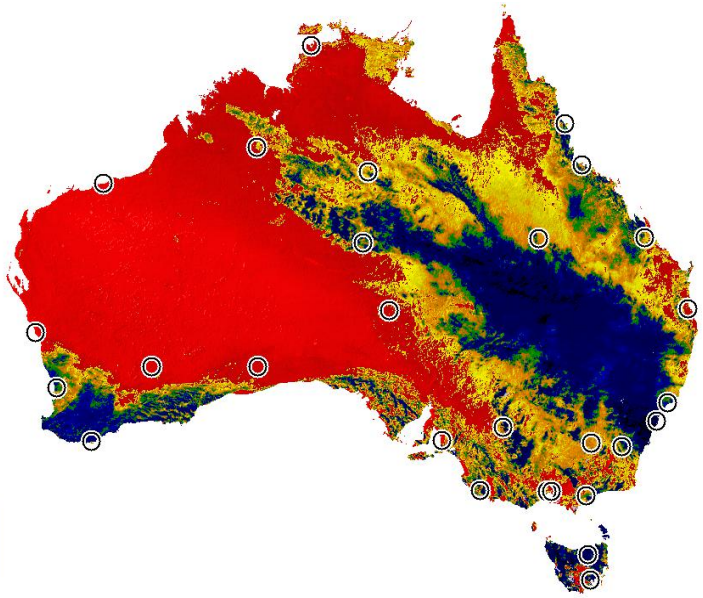
Extreme Meteorological Years

Data Quality Assurance

Station Data Calibration

ENERGY IMPACT ON COMMERICAL, RESIDENTAL AND PLANT SYSTEMS AND RENEWABLE ENERGY SYSTEMS





EXEMPLARY ENERGY

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Australian Solar Energy Society

Exemplary Energy provides solar radiation data for AuSES publications
www.auses.org.au/solar-radiation-handbook

Exemplary Climate Data Services

ADVANCED CLIMATE KNOWLEDGE

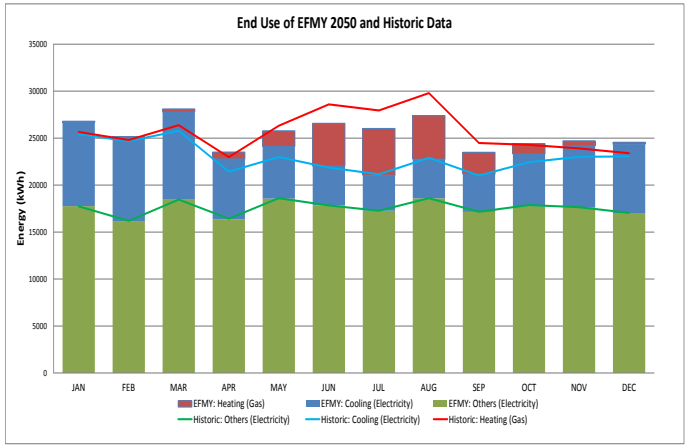
- Solar Data for Anywhere in Australia
- Full Hourly Data Sets for Any Weather Site
- Historically Typical Data
- Extreme Weather Data

- Projected Future Data
- Immediate Past Data for Monitoring System Efficiency

ERSATZ FUTURE CLIMATE DATA

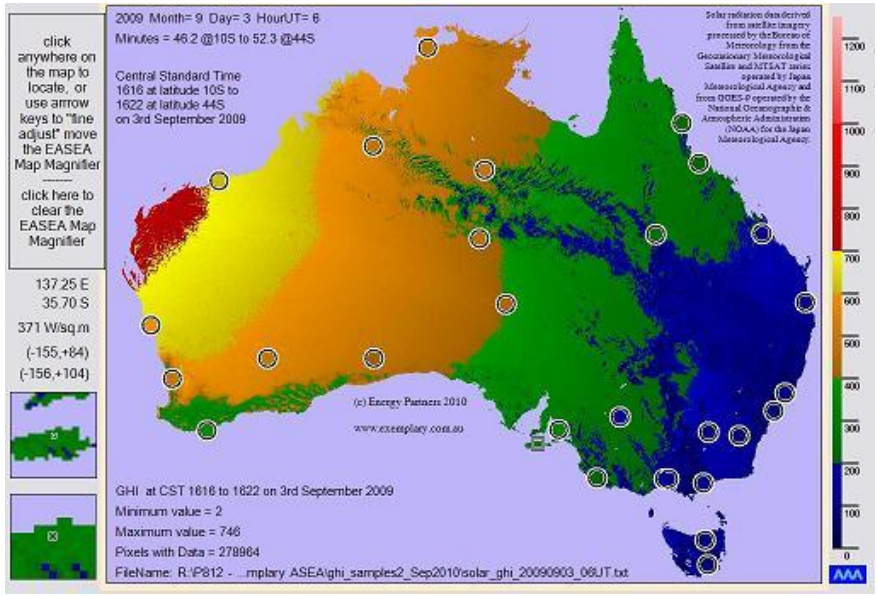
Ersatz Future Meteorological Year (EFMY) files can be used to ensure that buildings and renewable energy systems are designed and financed with consideration of a changing climate. This can be achieved by accurately predicting the range of likely future responses for a building or system.

EFMYs are created from 20 global climate change models used by the CSIRO and projected change values for temperature, wind speed, humidity and radiation. These EFMYs have adjustments of hourly values for a selected TMY in line with these parameters.



REAL TIME WEATHER DATA

Real-time data can be used to create real-year-to-date and actual year data sets. Through simulation, these data sets can be applied to system output and building energy consumption information, allowing models to be 'calibrated' and weather-sensitive systems monitored for efficient performance.



These real-time data sets are called Real Time Meteorological Year (RTMY) weather files. These can be used to assess the consumption of residential or commercial buildings in an actual month or year. As a result, a building or system can be monitored for optimum performance.

TYPICAL METEOROLOGICAL YEAR

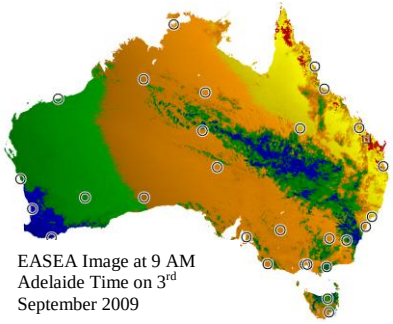
Energy Partners' current capabilities include producing a set of TMY and XMY files for any particular site where weather measurement data are available.

Solar Data for Anywhere in Australia

Station Data Calibration

Data Quality Assurance provided by:

- Check against Values from nearby Bureau of Meteorology Sites
- Altitude Adjustment
- Terrain Adjustment
- Climatic Adjustment for Short Term Measurements



EASEA Image at 9 AM Adelaide Time on 3rd September 2009

Extreme Meteorological Years

Data Quality Assurance

Station Data Calibration

EXTREME METEOROLOGICAL YEAR DATA