Solar PV Nowcasting Update

- ✓ Solar forecasting for every 2km2 grid
- ✓ Real-time solar irradiance
- ✓ Data enabling operational visibility over your assets & network
- ✓ Data and tools for the solar powered future

Dr. Nick Engerer
Chief Technology Officer

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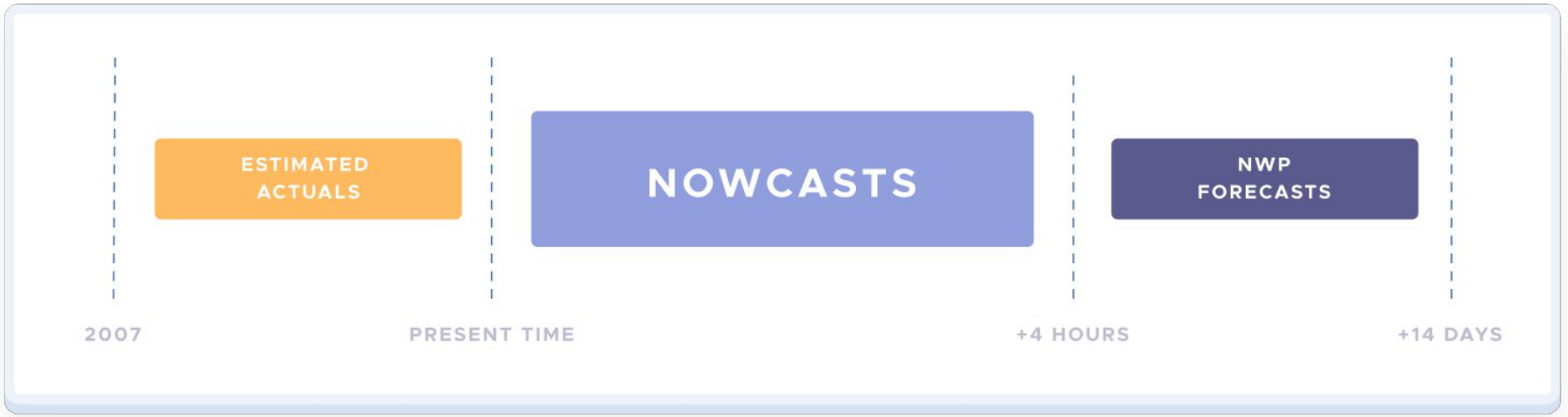
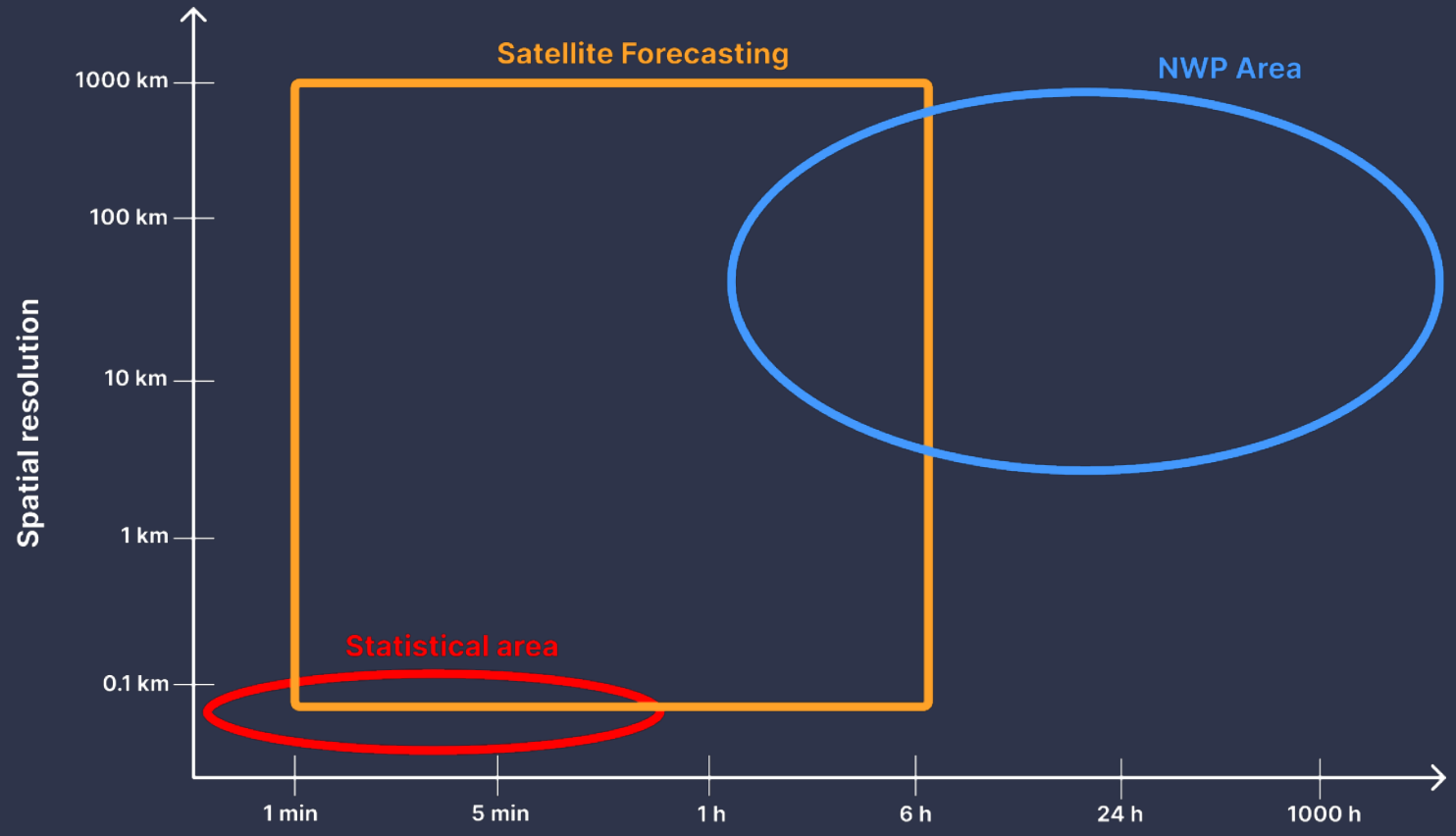
What is Nowcasting?



Different Irradiance Forecasting Methods



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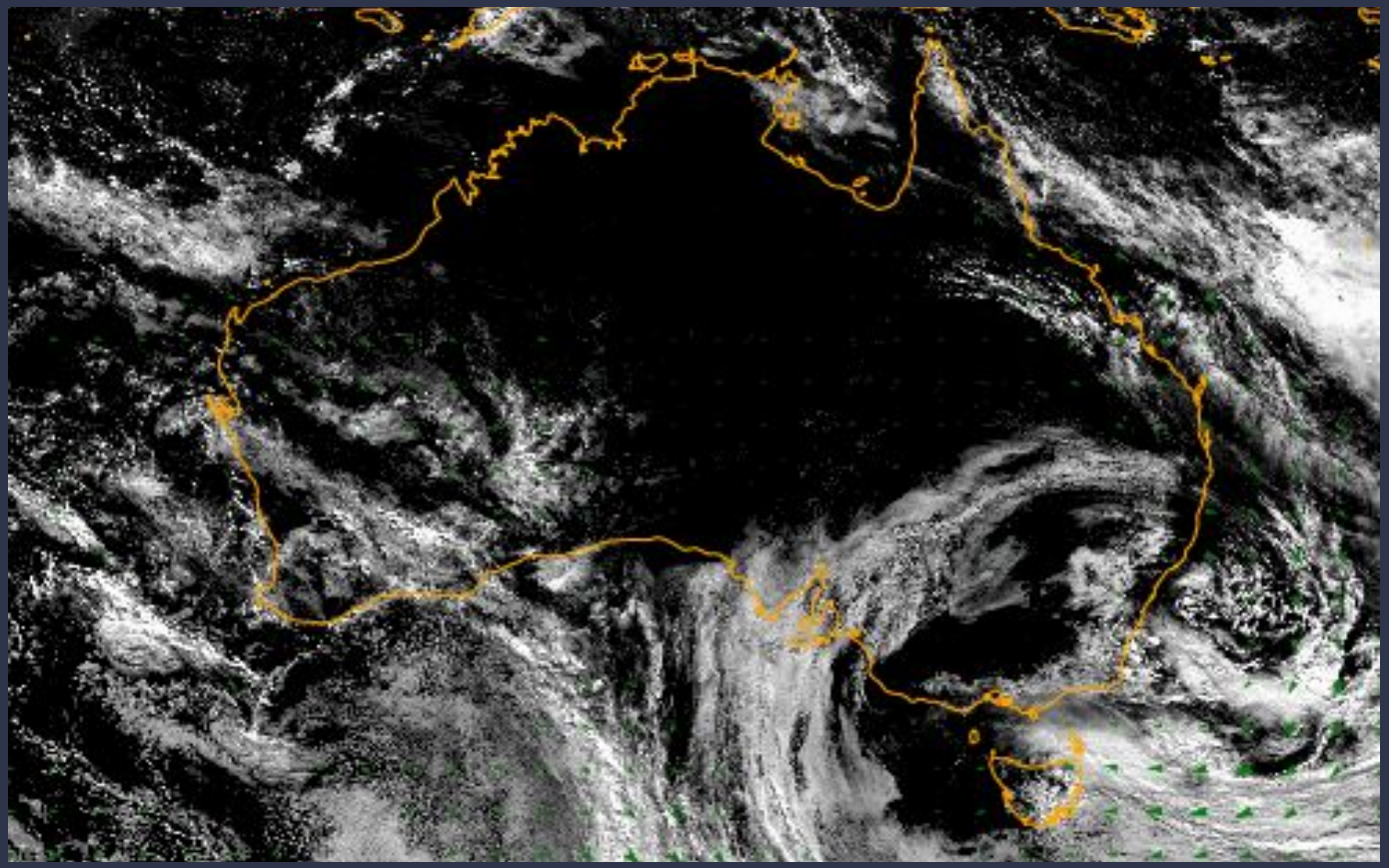
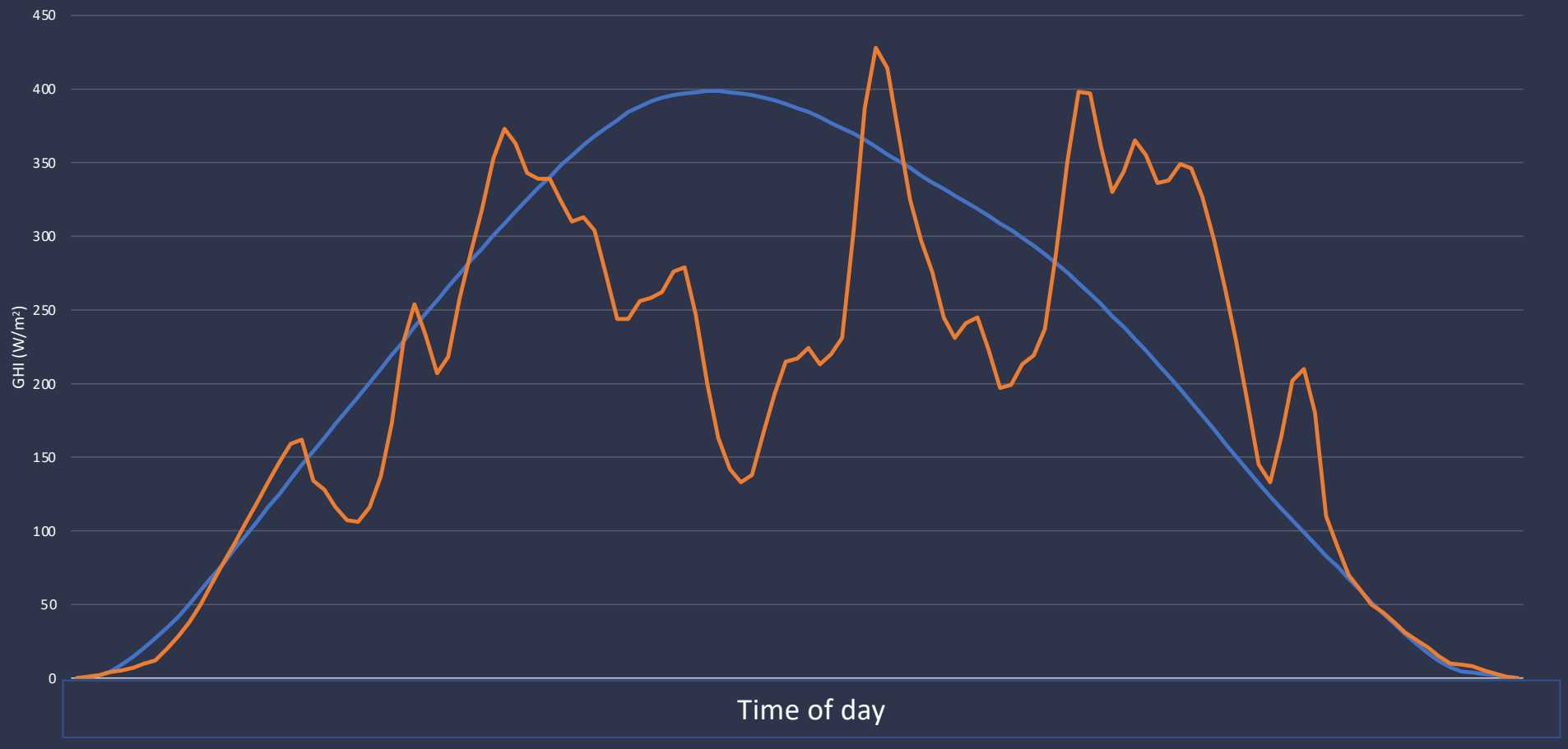
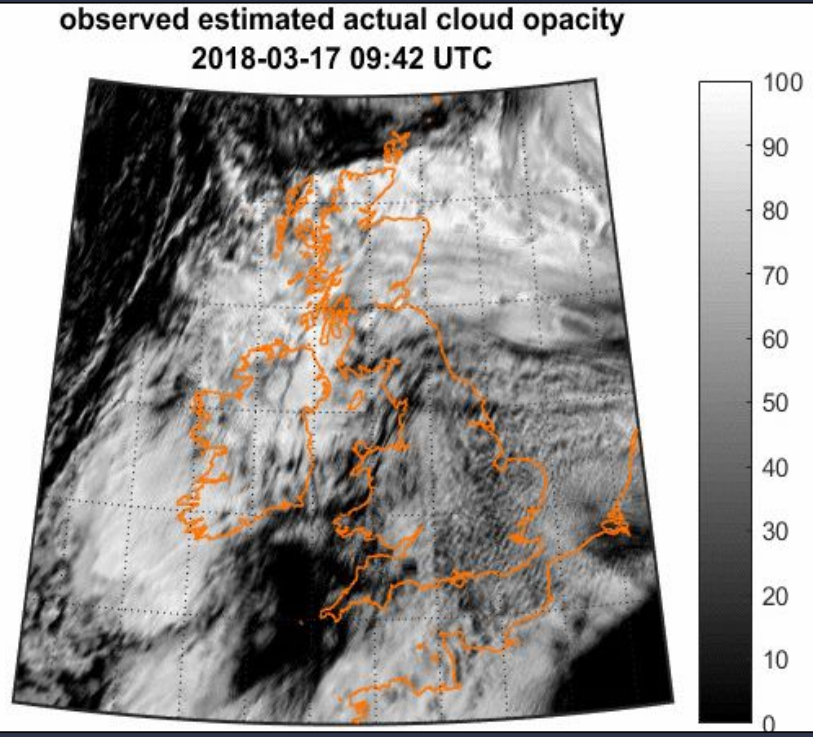
Semi-dynamical Nowcasting



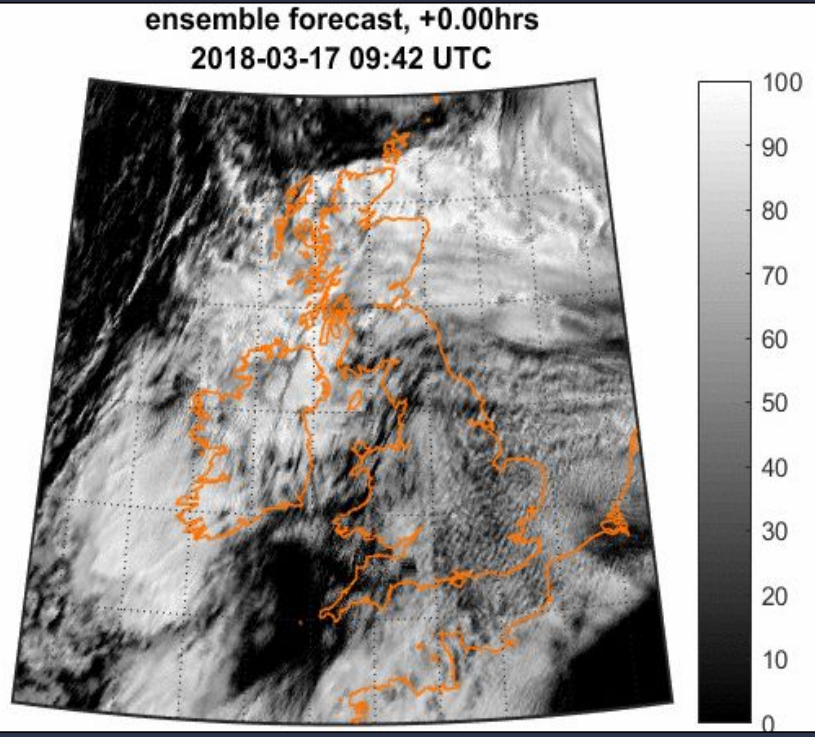
What does this look like? - NWP vs Nowcasts



Nowcasting Probabilistic Ensemble



Cloud Observations



Forecast

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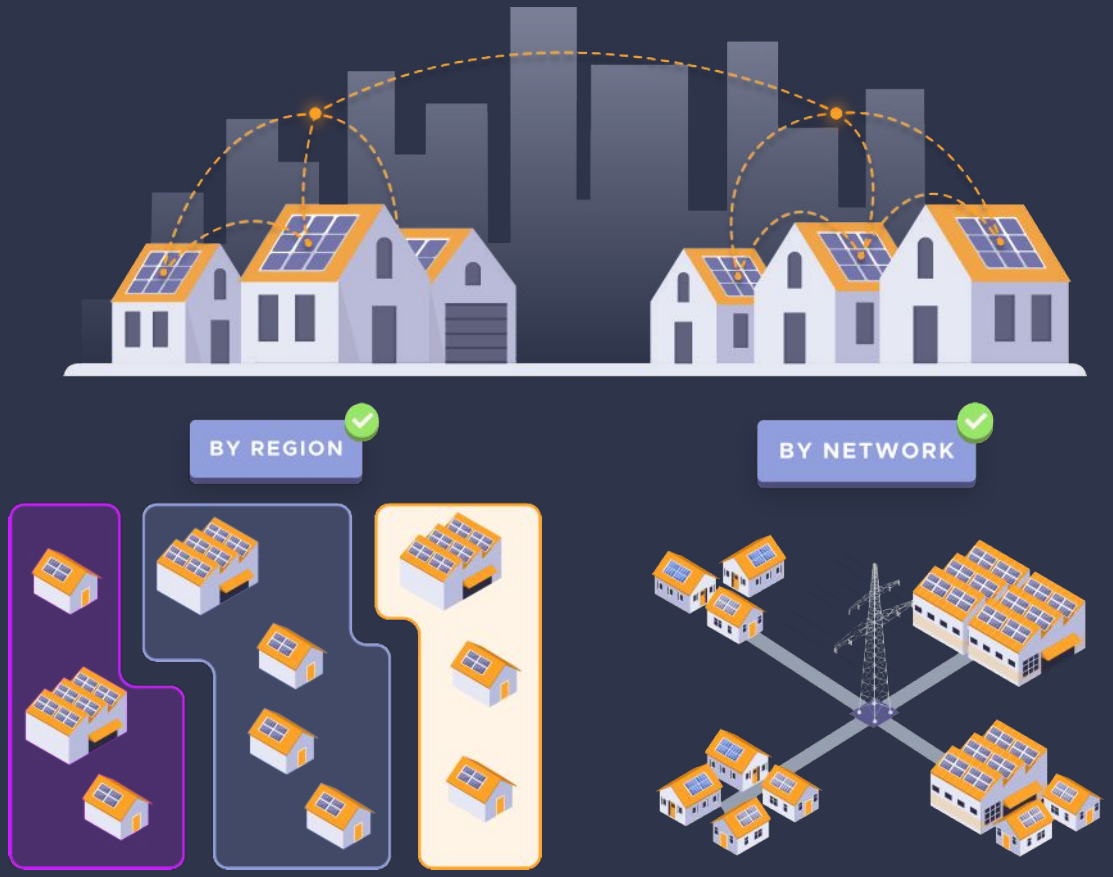
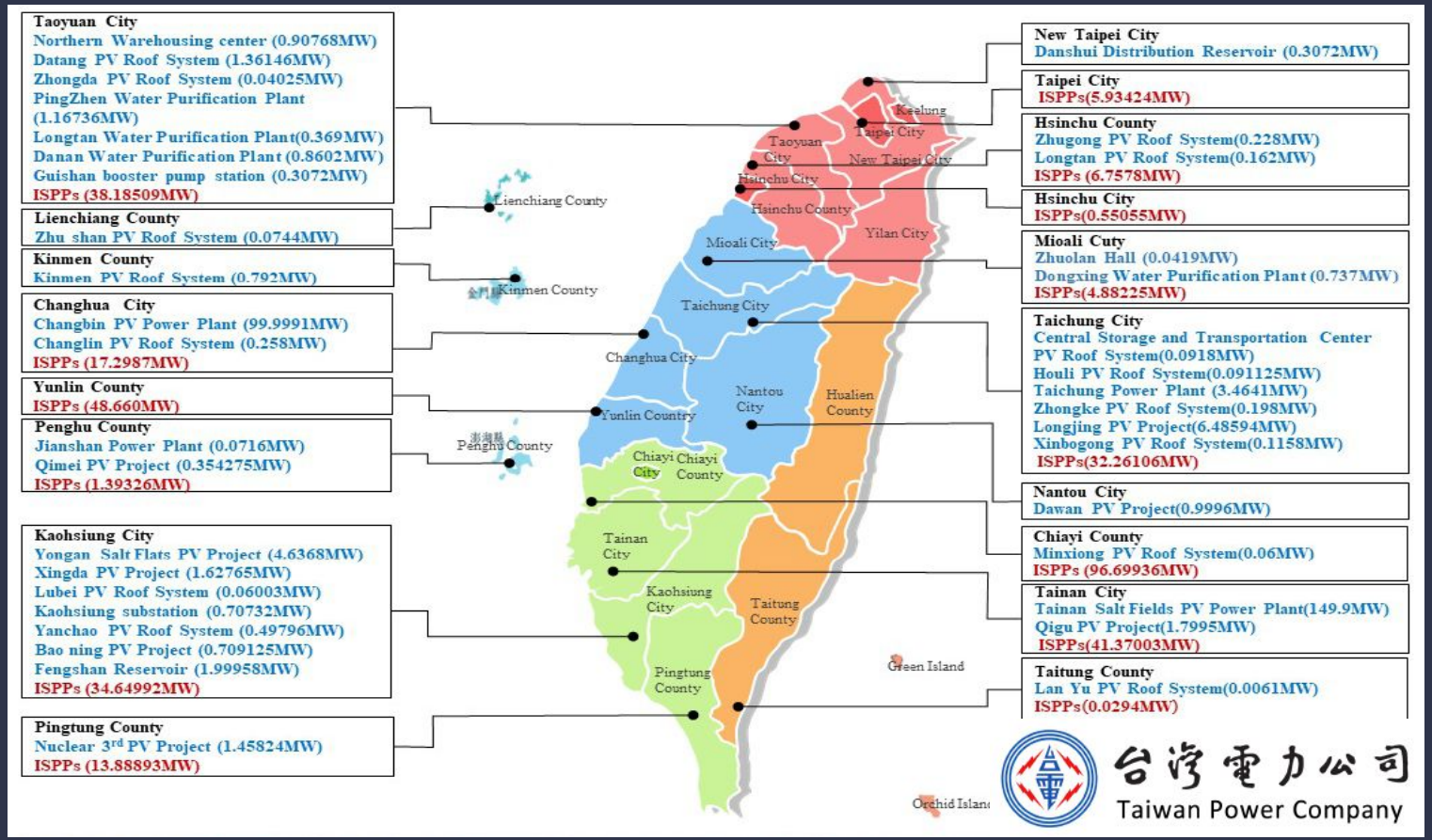
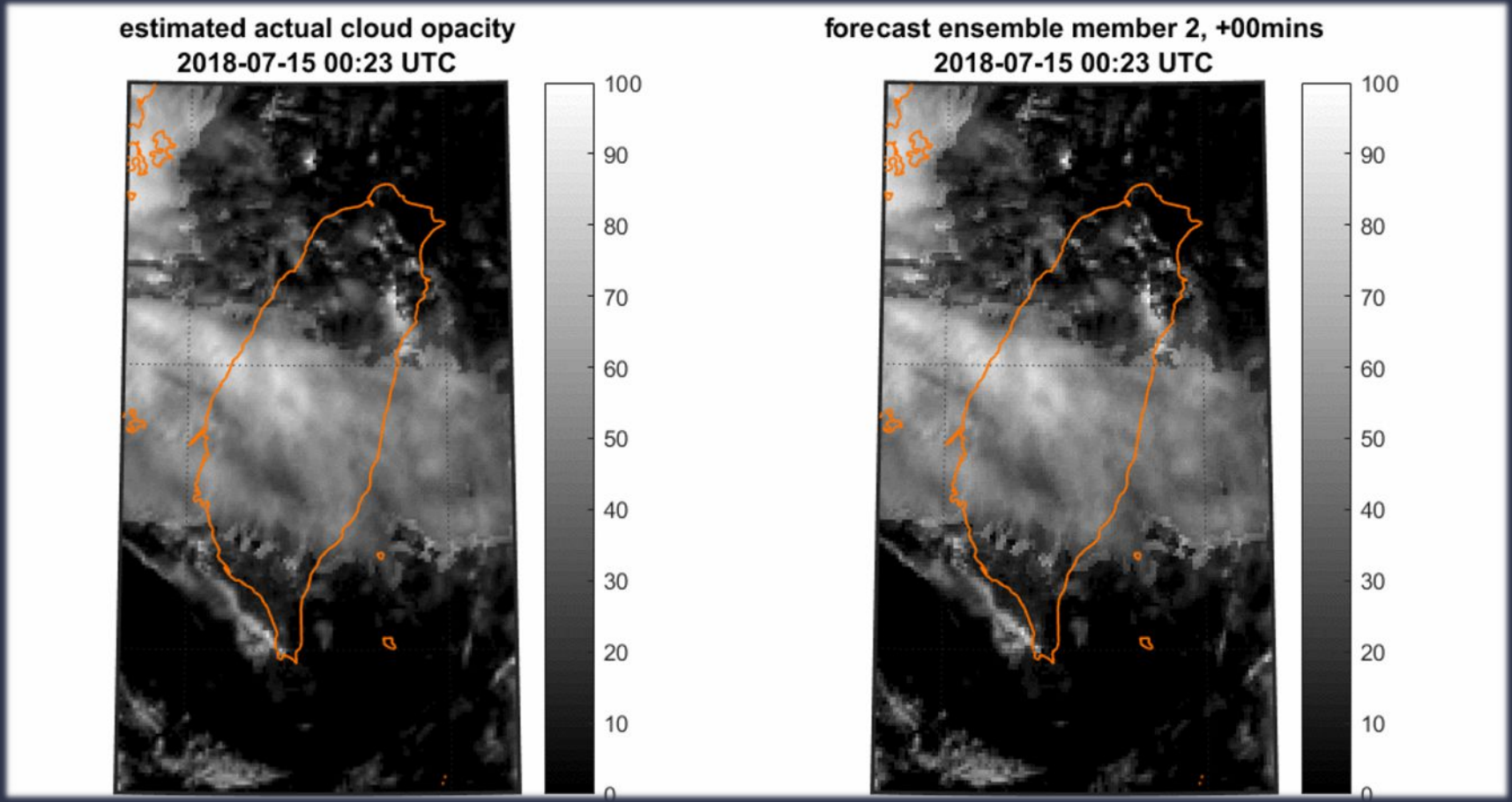
Data For Every 2km^2 Grid

Grid Aggregations



Taiwan installed capacity by county/city





Cloud Observations

Forecasts

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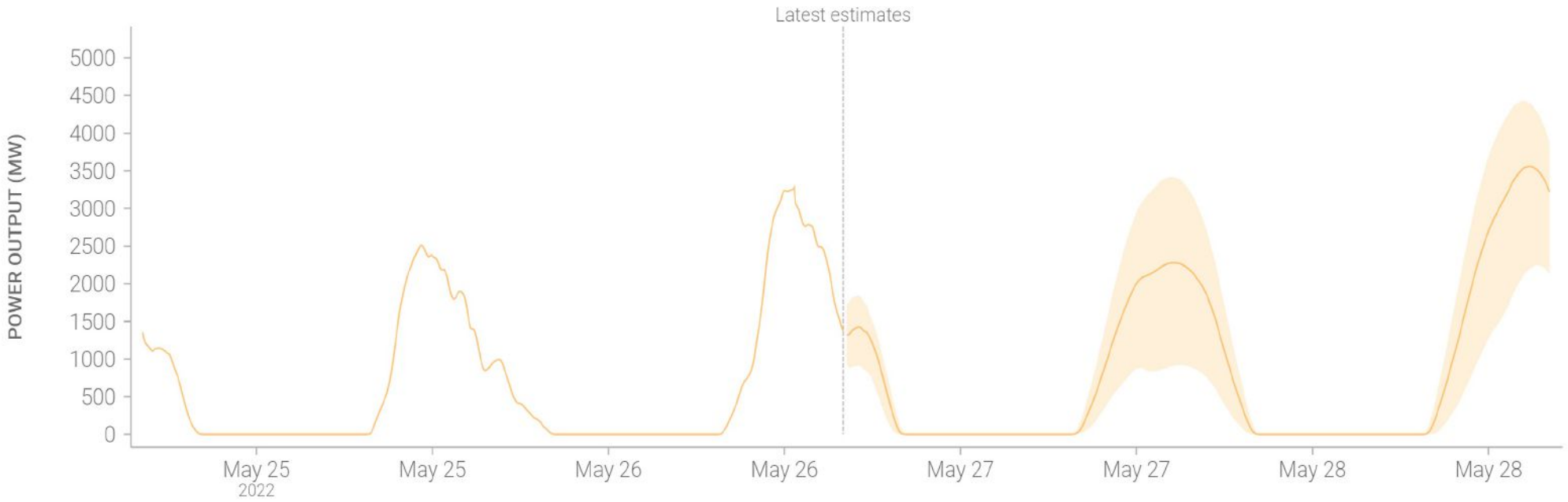
Taiwan Island Total Power Estimate



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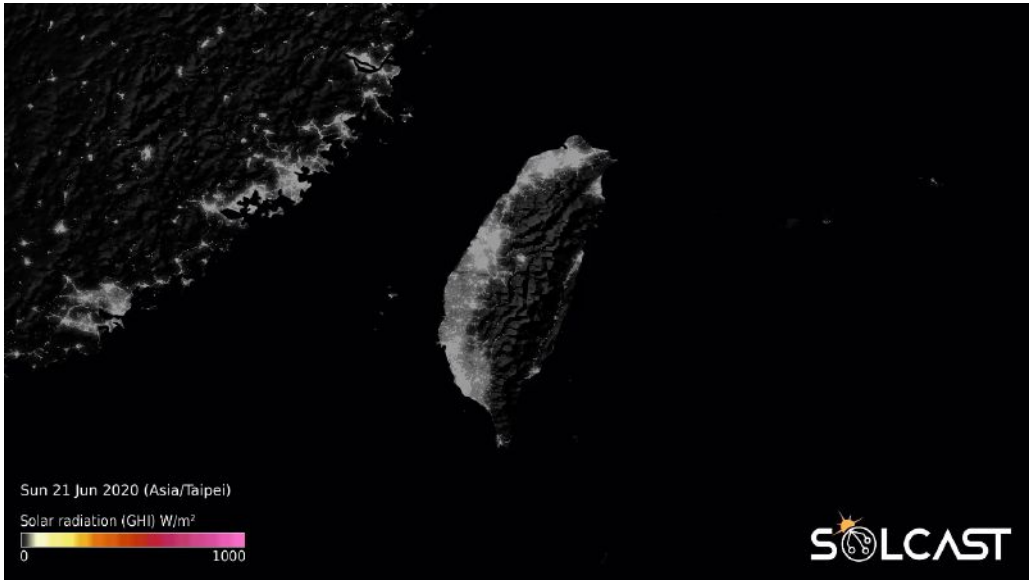
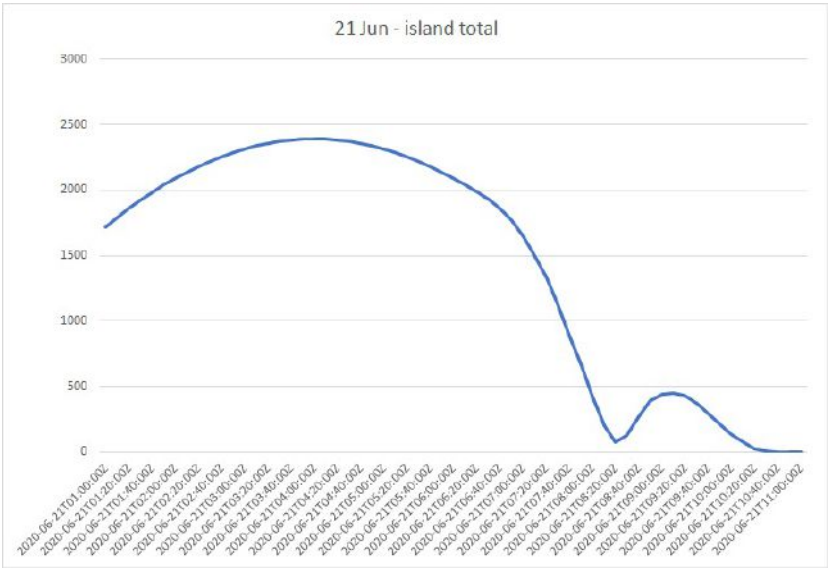
Operational visibility

Solar eclipse event causing dramatic fall in afternoon generation of Taiwan grid-connected PV captured in Solcast data. June 21 2020

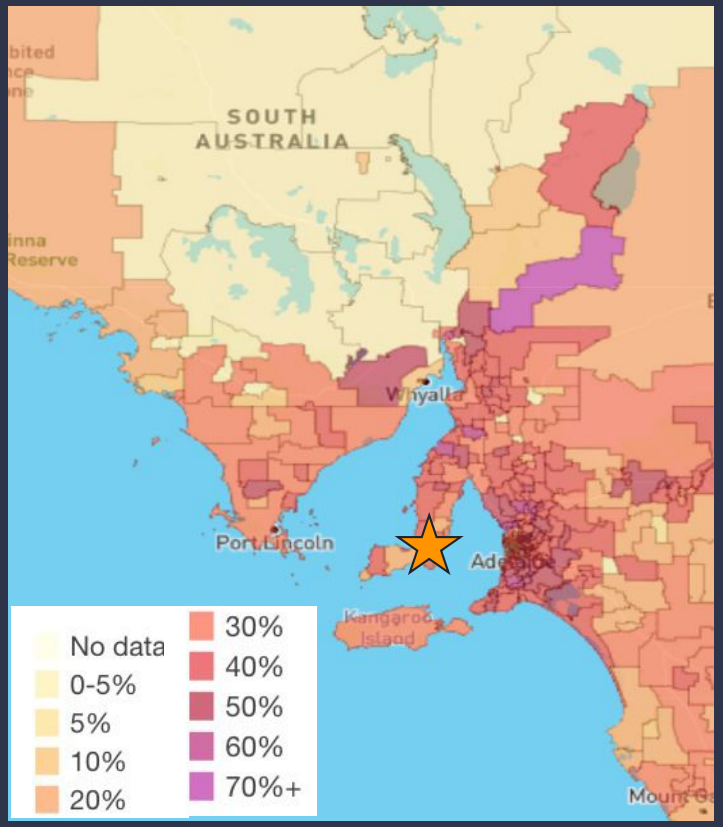
台灣電力公司
Taiwan Power Company

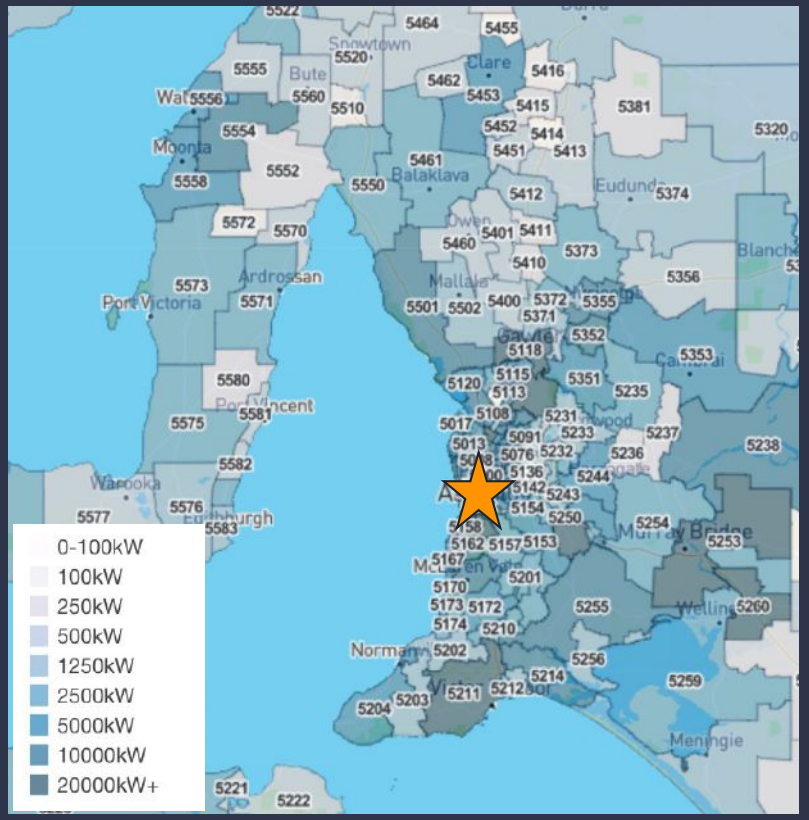




South
Australia
Adelaide
Thu 02 Jun 2022 (Australia/Canberra)
Solar radiation (GHI) W/m²
0
1000
SOLCAST

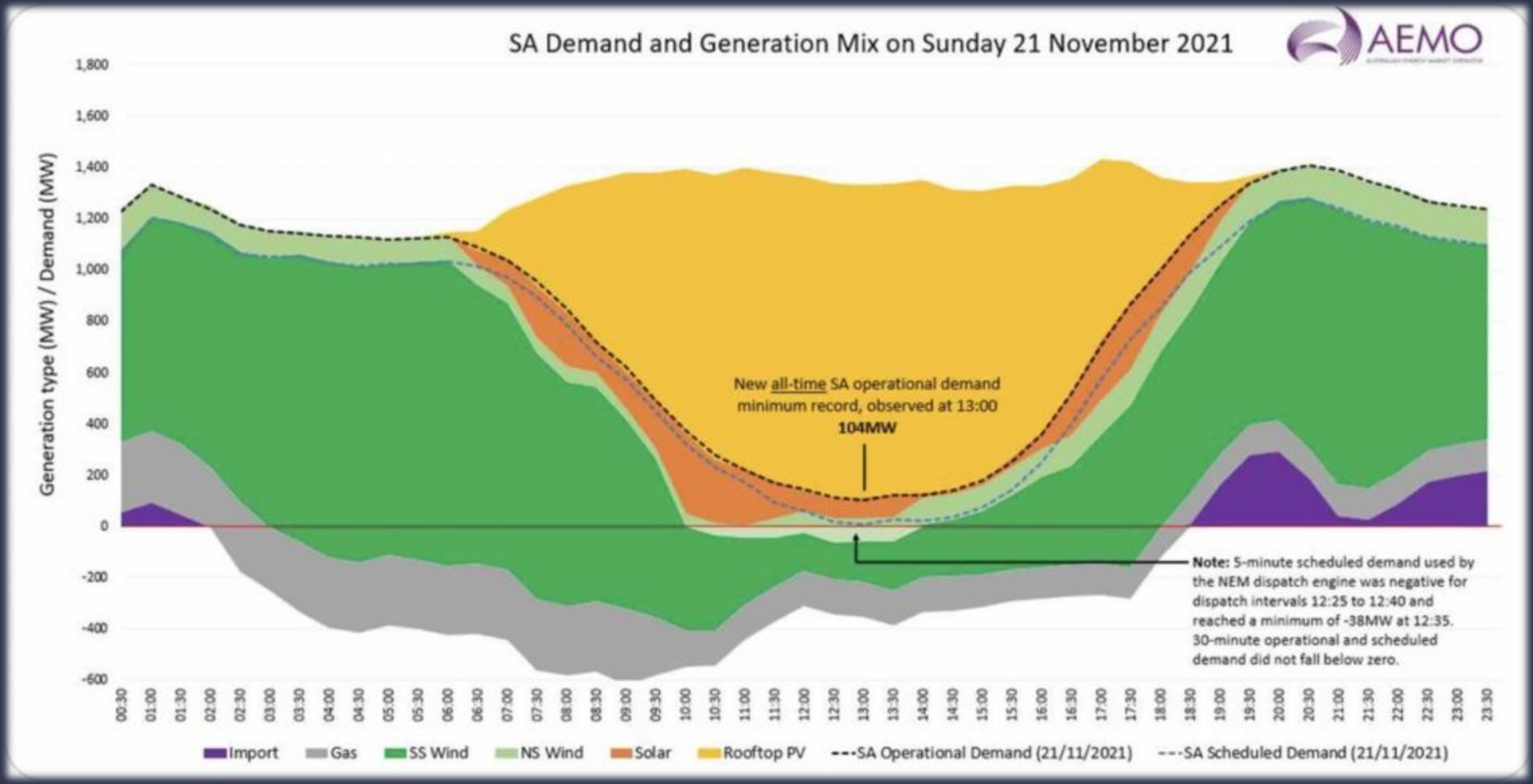
High Penetration of Rooftop Solar in South Australia





Credit: Australia PV Institute

South Australia Rooftop PV Generation



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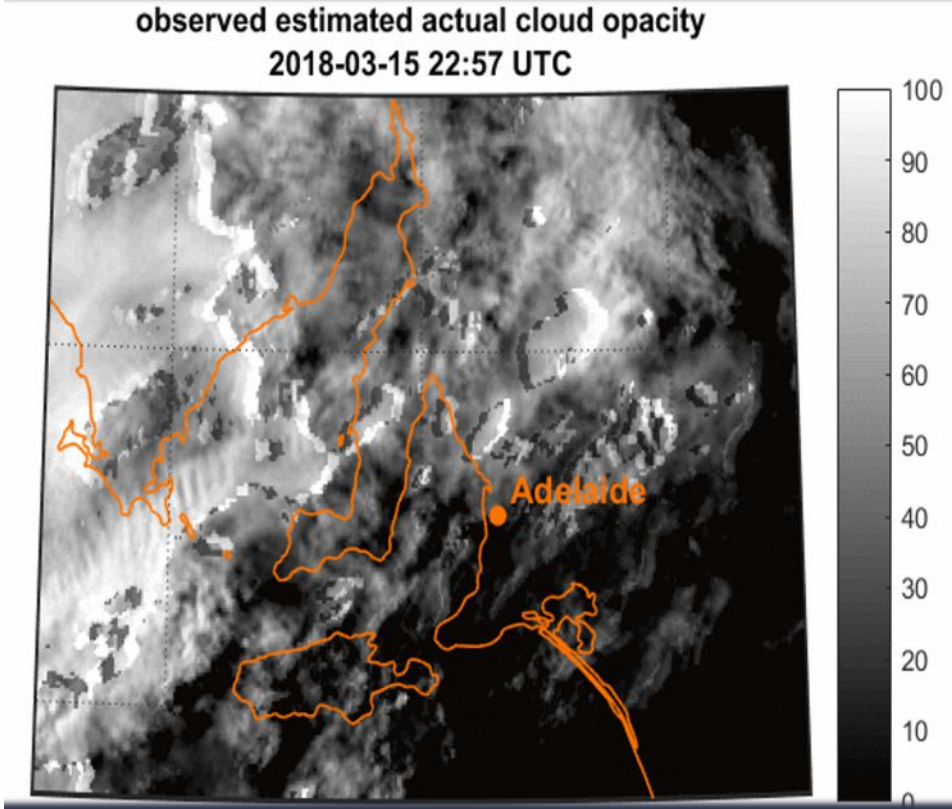
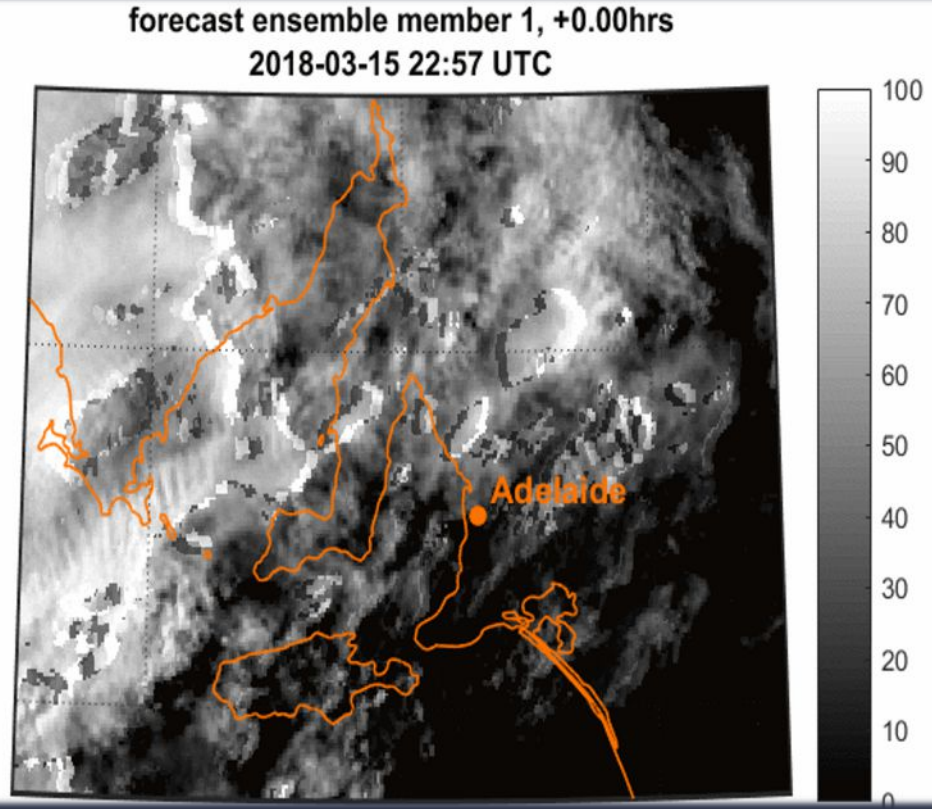


Cloud Observations



Forecasts

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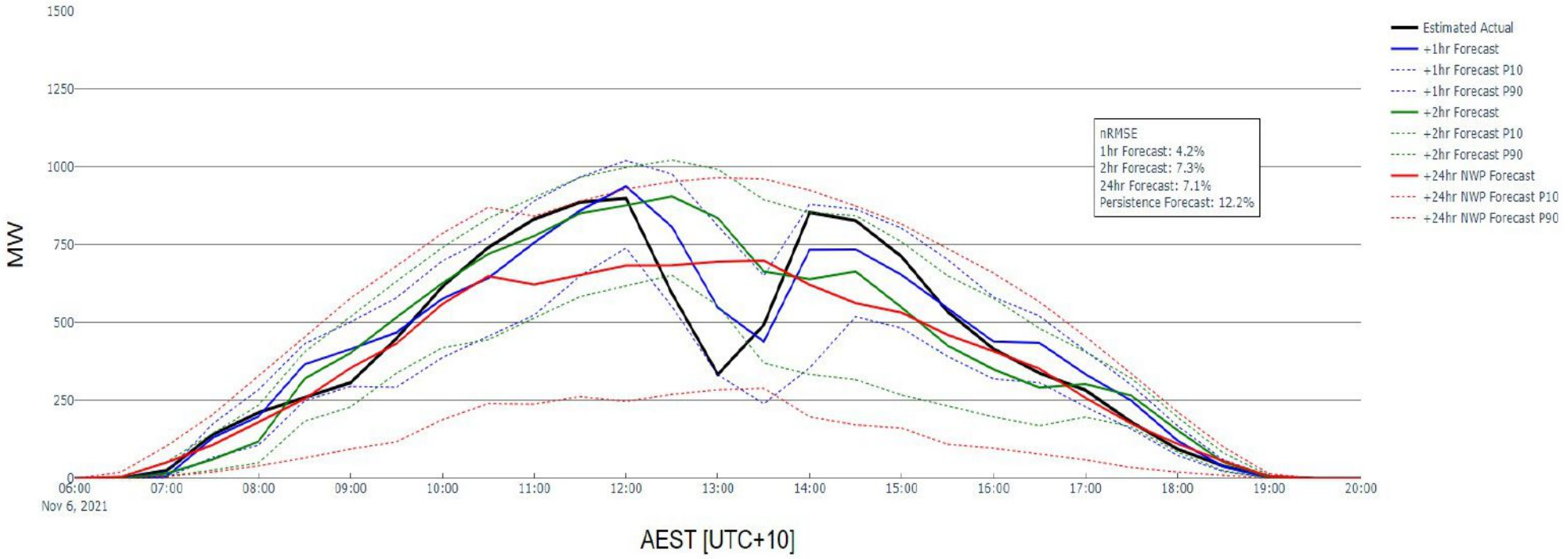
South Australia Rooftop Forecasts Total (MW)



Clients Utilising Nowcasts

Free access for Students & Researchers!

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