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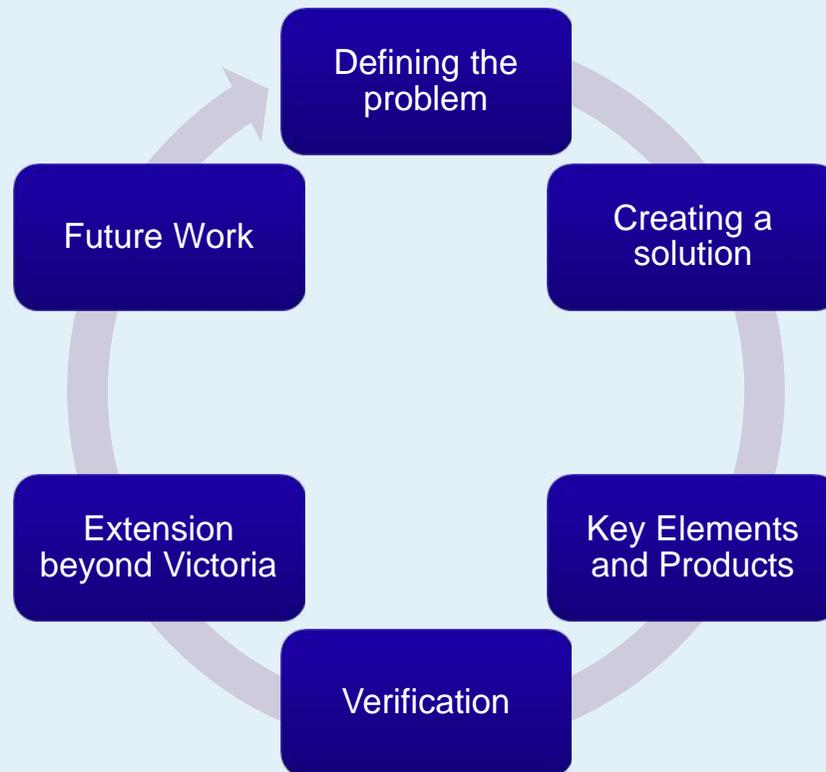


A New Quantitative Smoke and Air Quality Forecasting System for Victoria

Monica Long, Alan Wain, Martin Cope, Beth Ebert,
Maree Carroll, Kevin Parkyn, Natalie Tostovrsnik

Photo by Jenny Howell FFMVic

Outline



Defining the problem

Minimise public exposure to unsafe levels of fine particles in smoke.



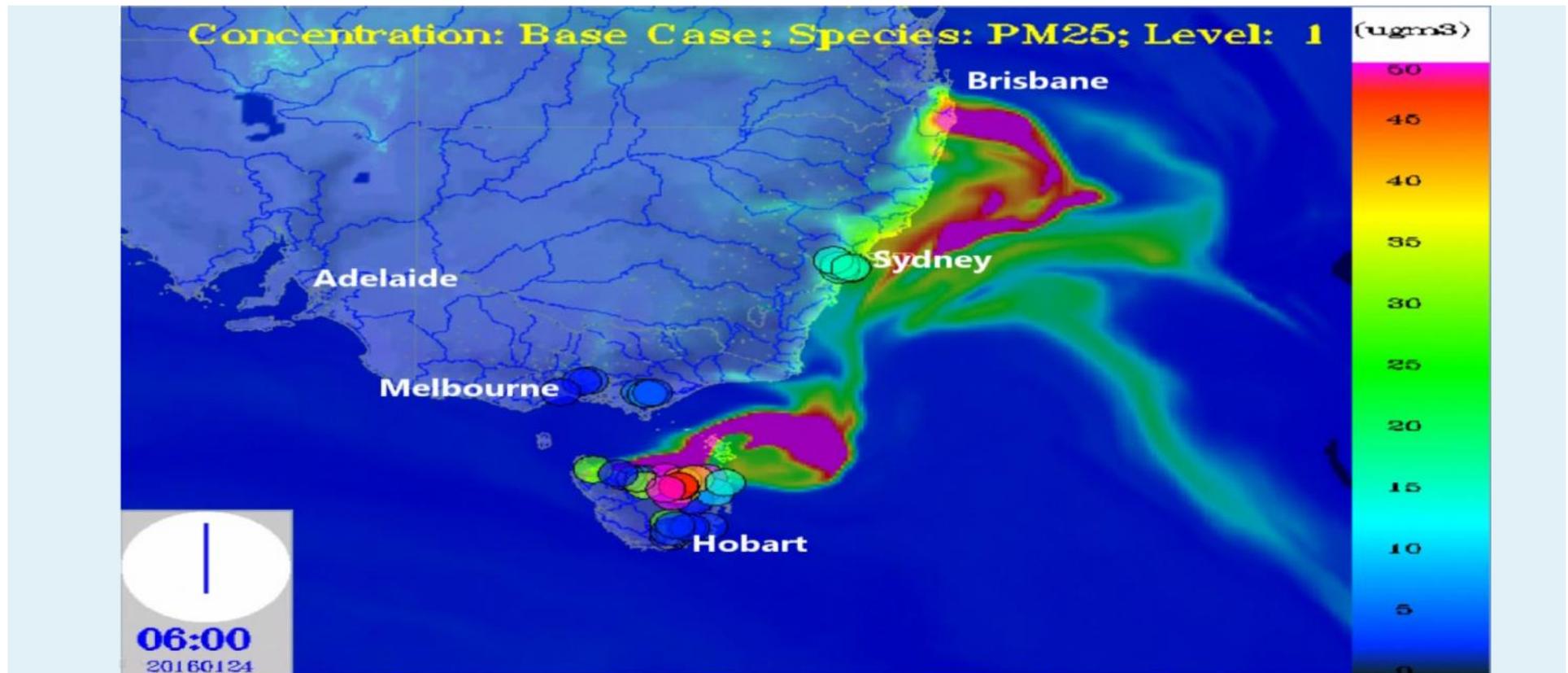
Victoria State Control Centre





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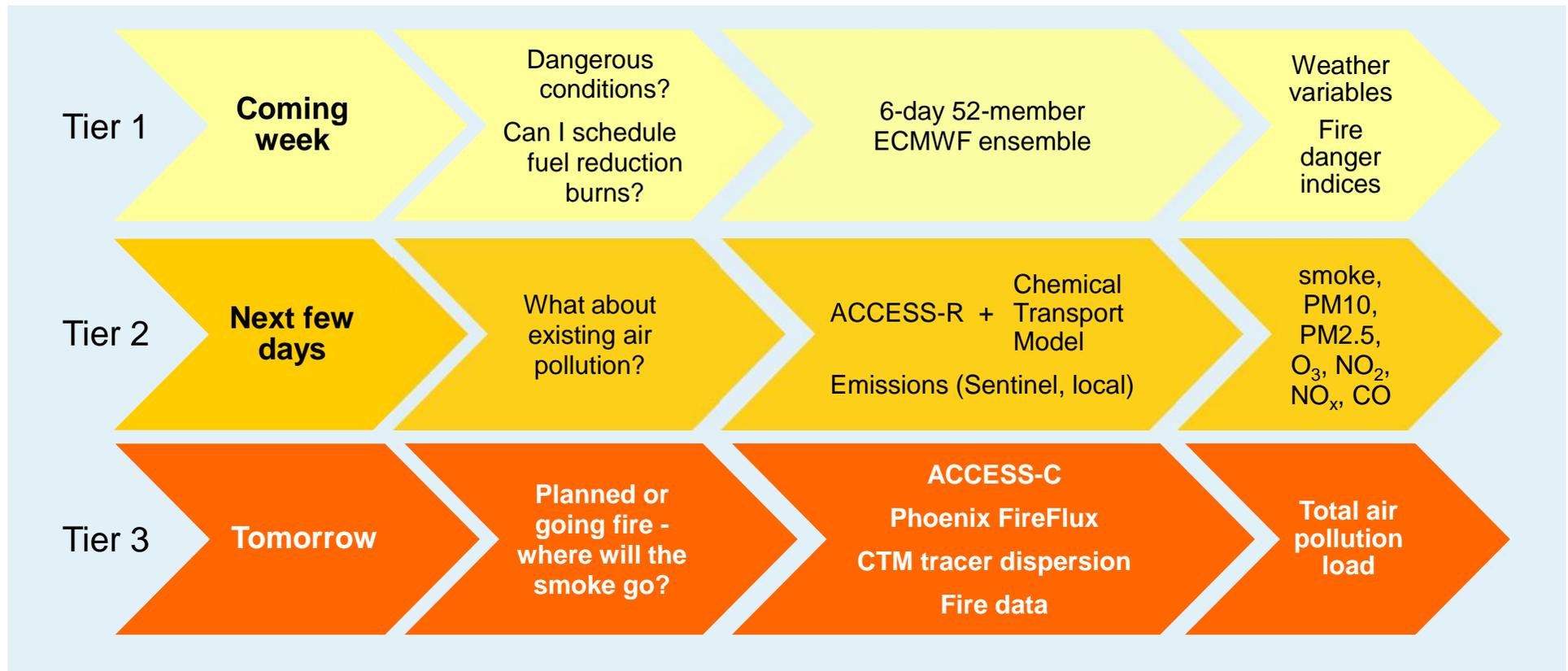
Smoke from outside the jurisdiction can also have an impact





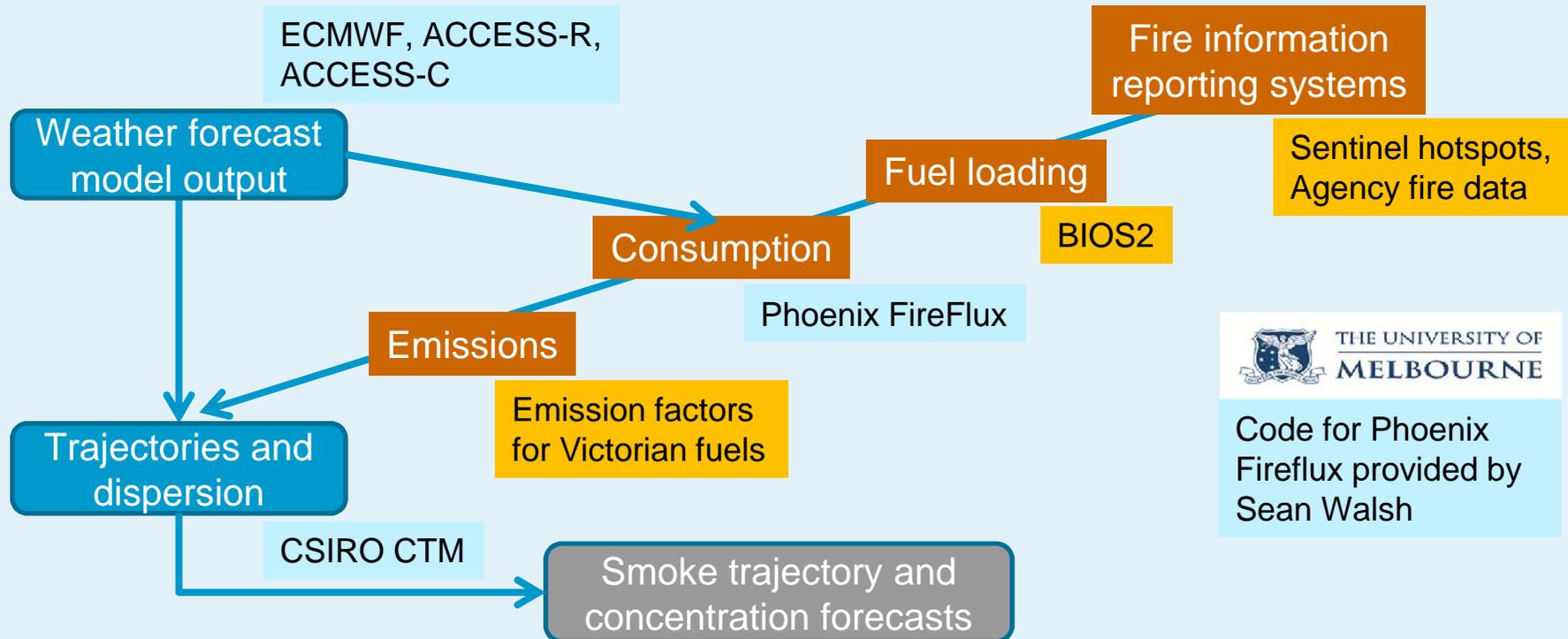
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Creating a solution



Creating a solution

Linked state-of-the-art models combining weather and fire information

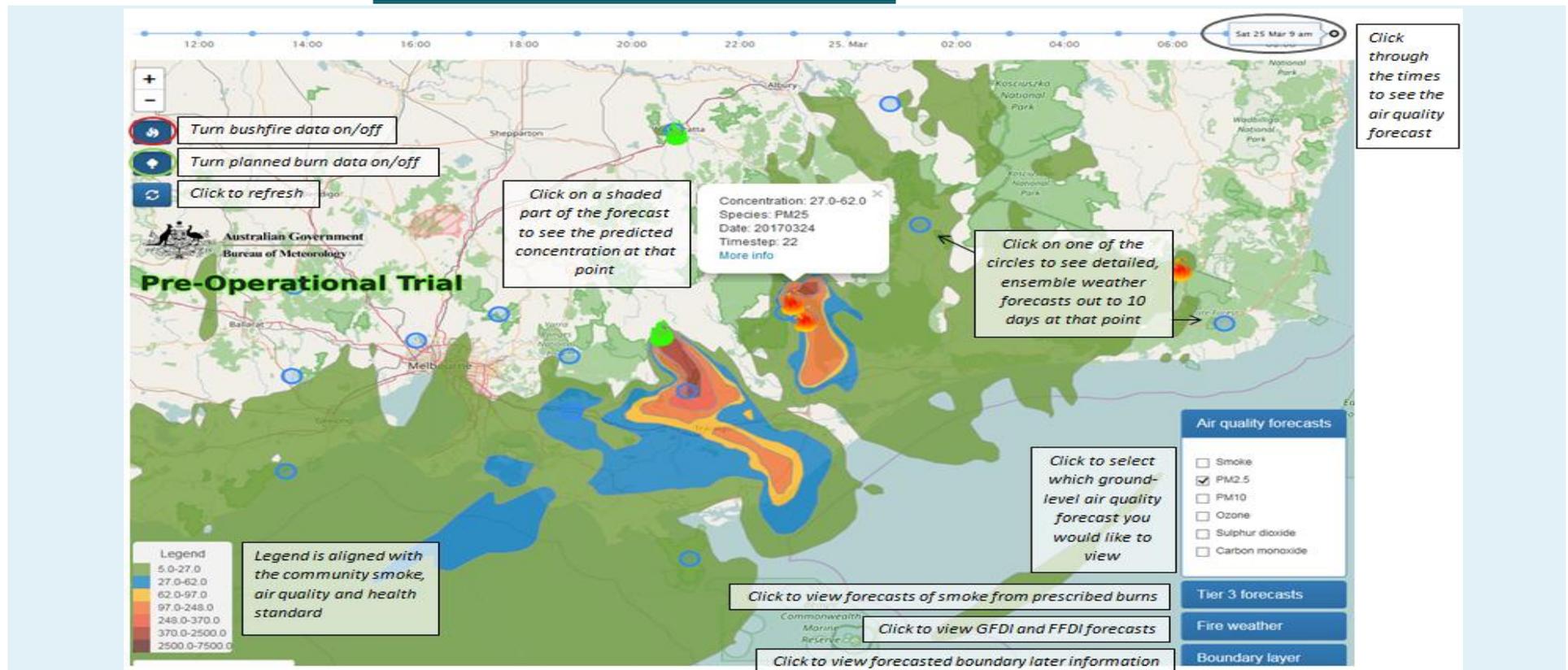




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Key Elements & Products

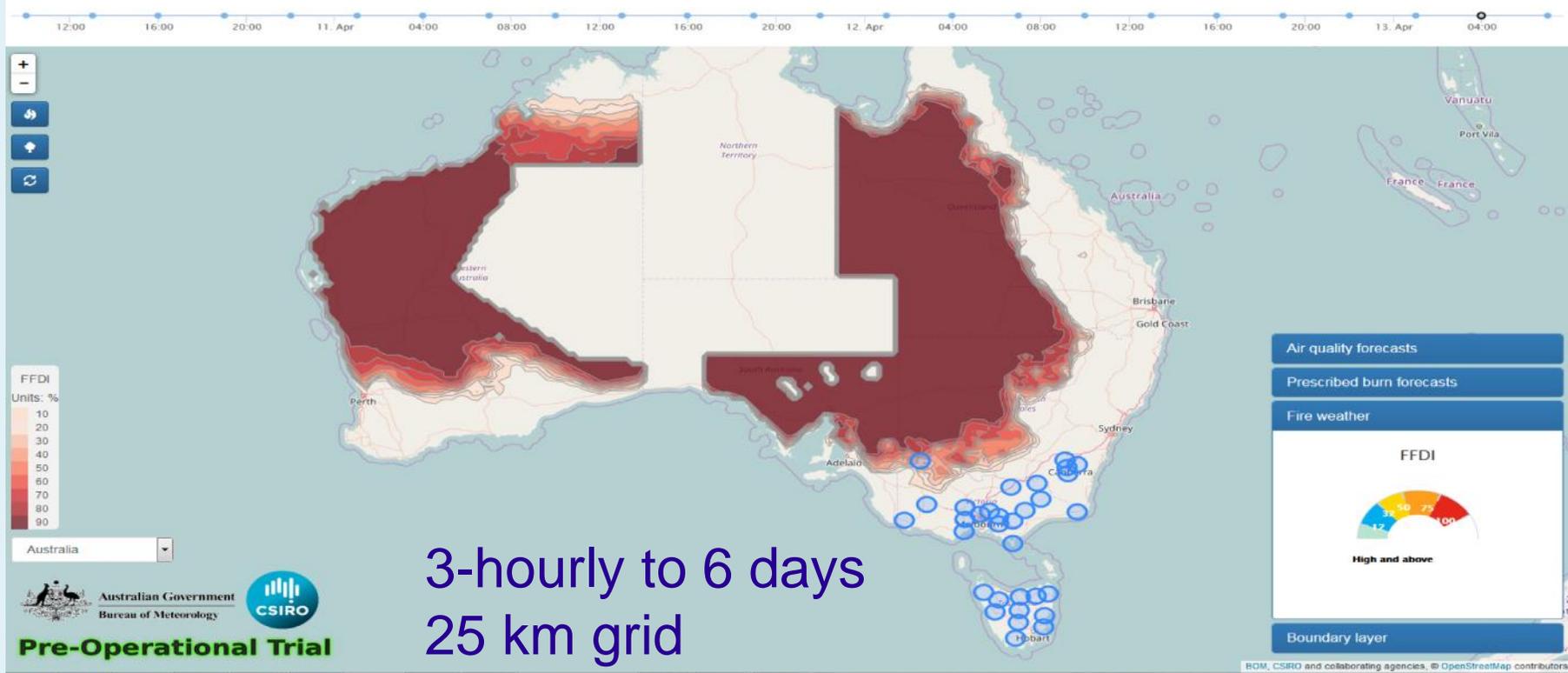
Web User Interface





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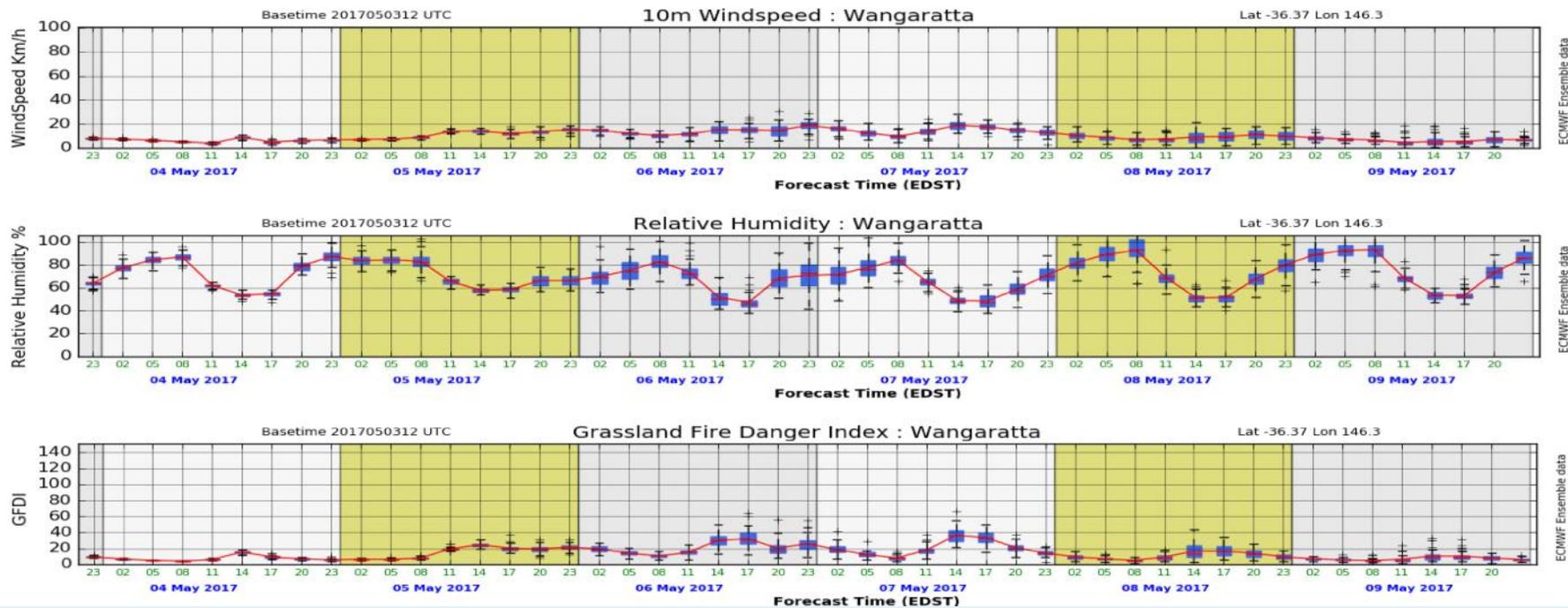
Tier 1: Coming Week FFDI Ensemble Forecasts





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Tier 1: Coming Week Point Location Forecasts

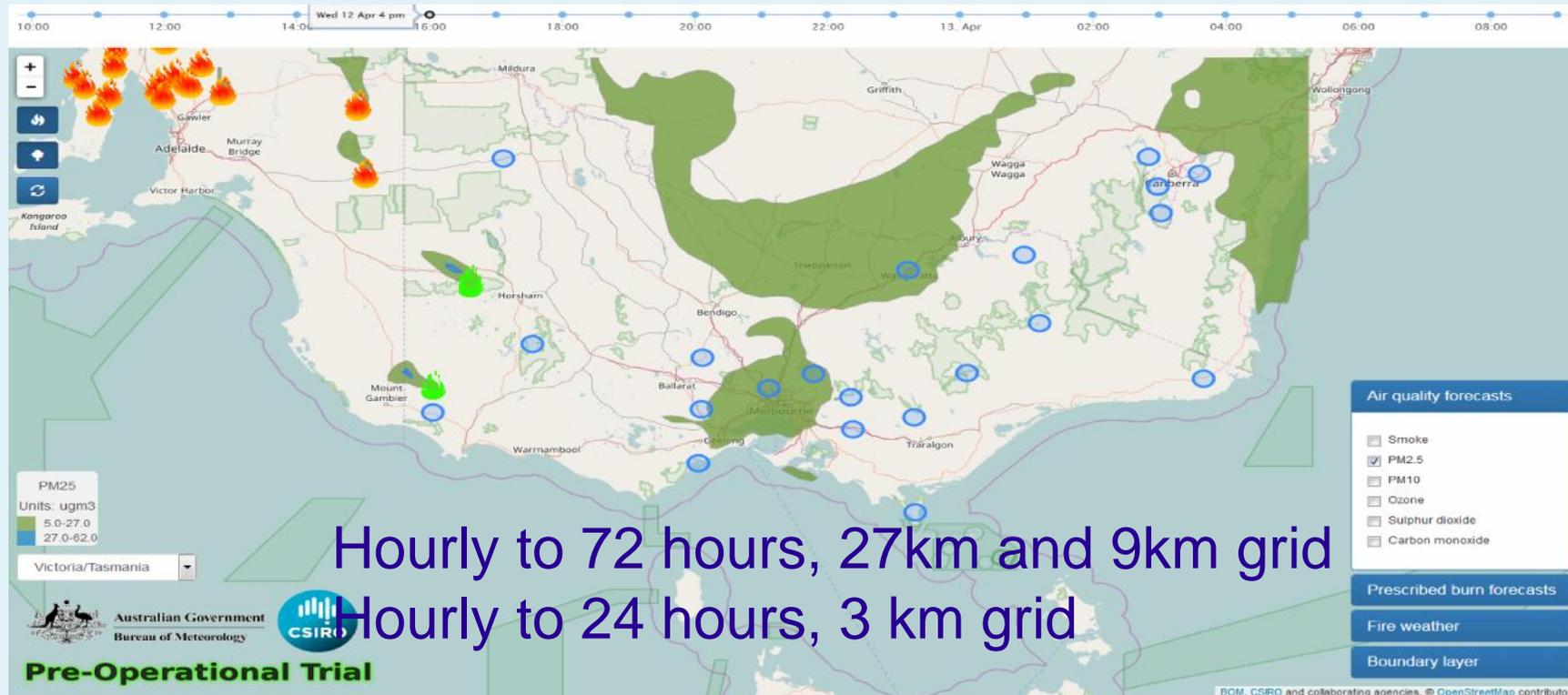


Wind speed, temperature, relative humidity, FFDI and GFDI
3-hourly to 6 days



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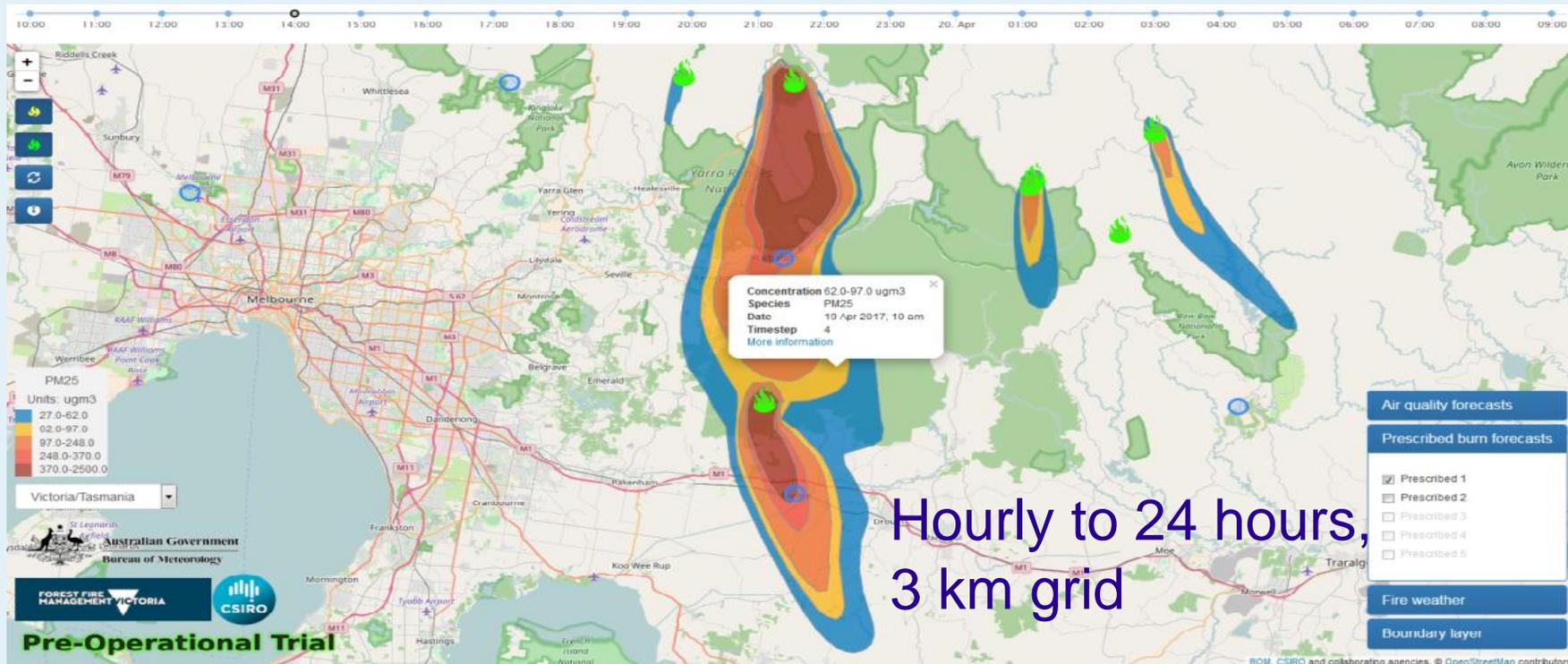
Tier 2: Next Few Days Air Quality Forecasts





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Tier 3: Tomorrow Prescribed Burn pollution load



Fuel reduction burn near Wodonga, 1 April 2017

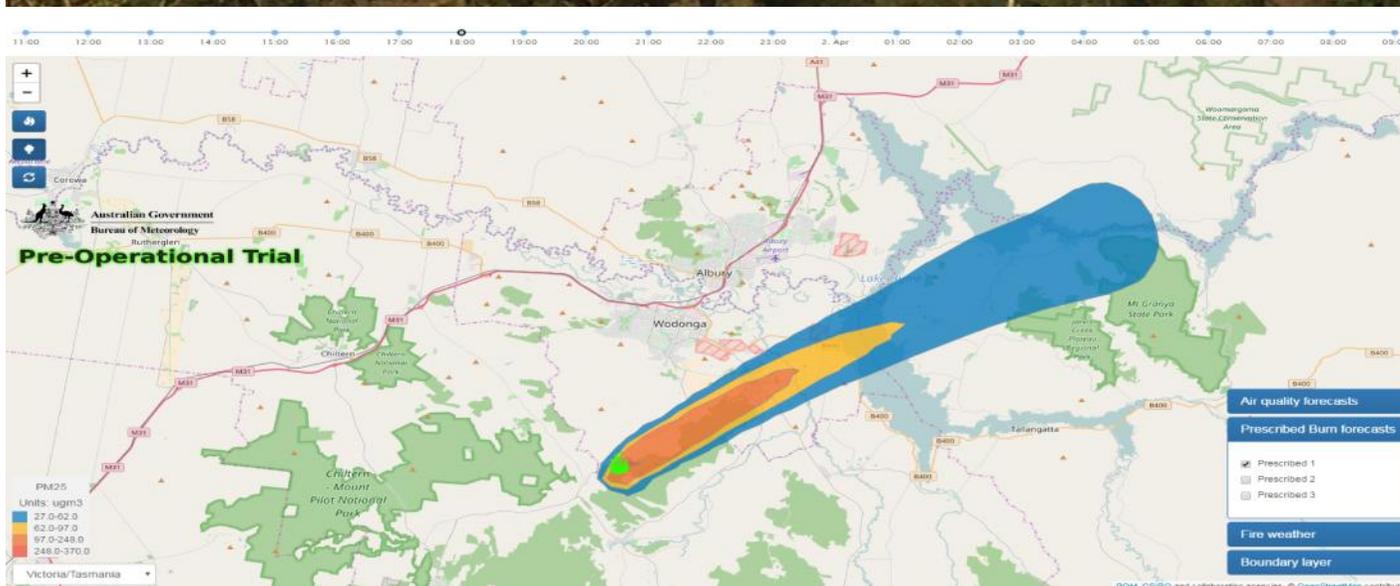


Photo by Lisa Beach



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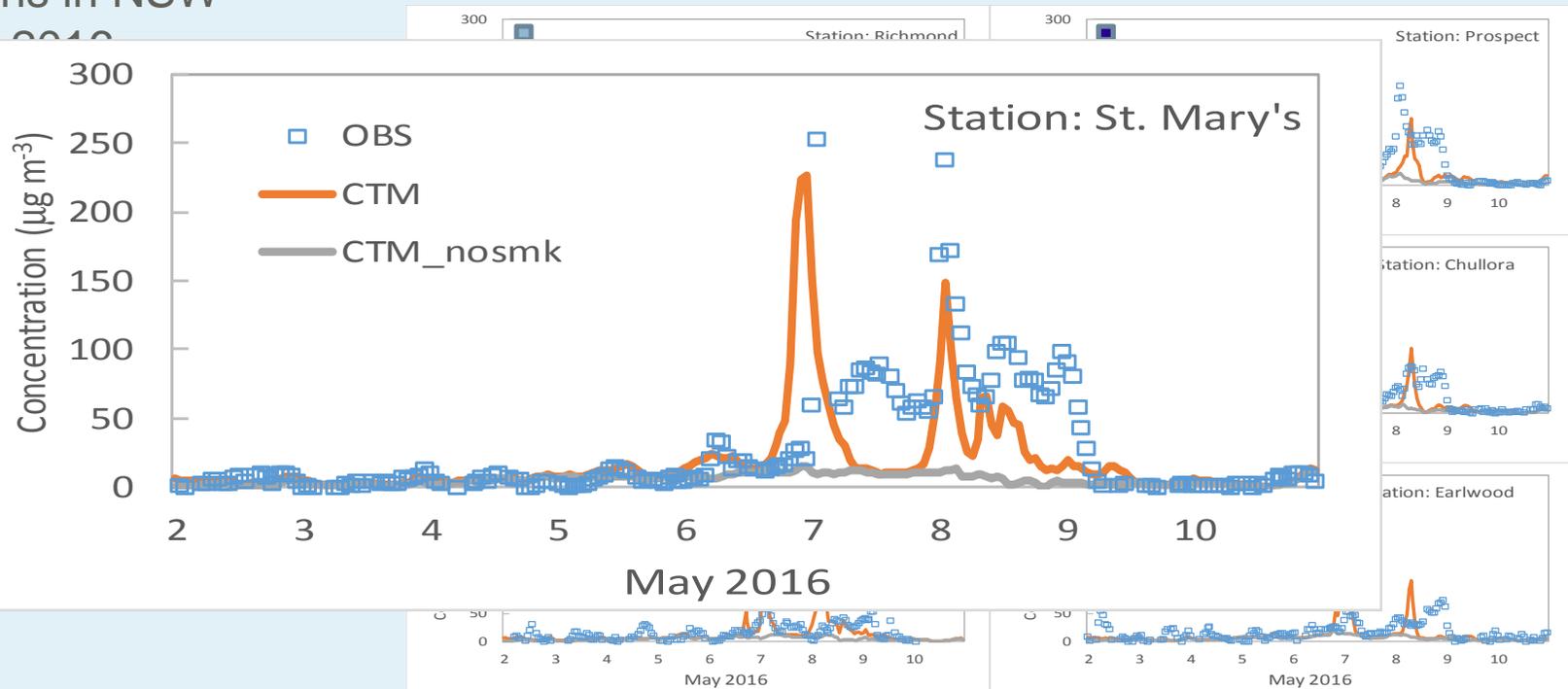
Verification Results



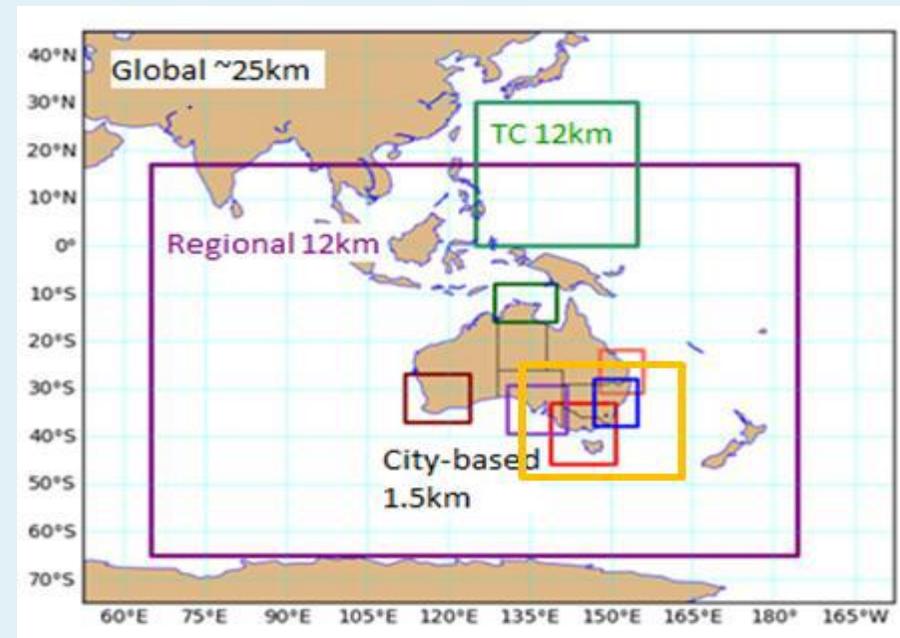
Major burns in NSW
2-10 May 2016



Verification of PM_{2.5} concentration

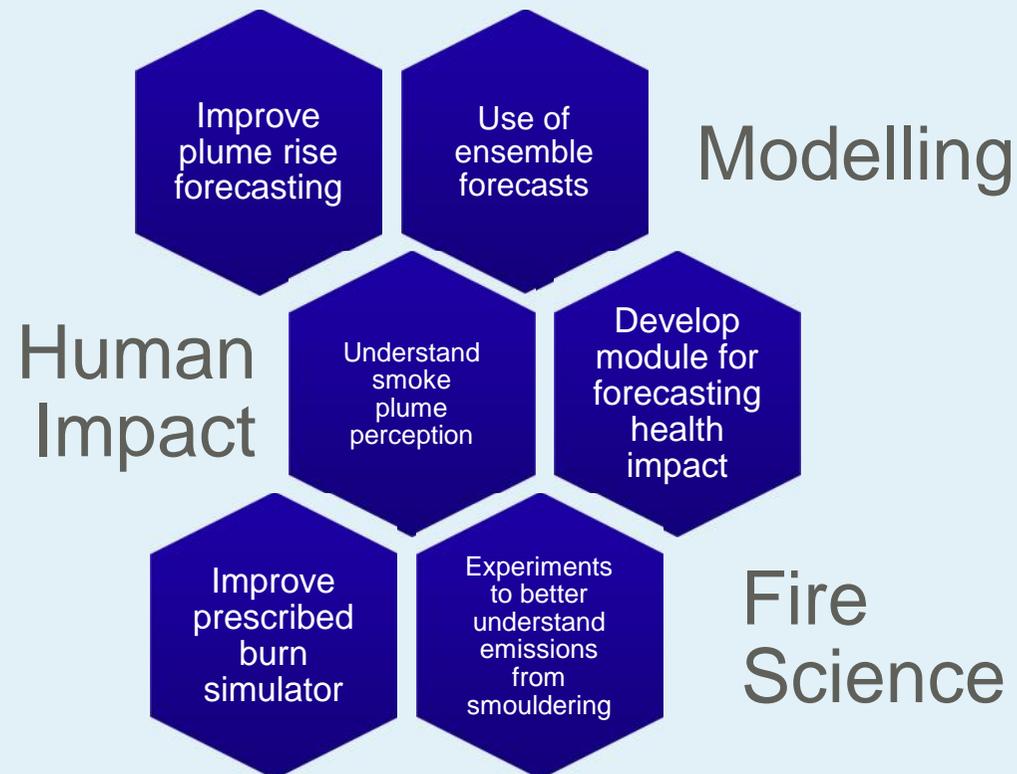


Extension beyond Victoria



ACCESS Model Domains

Future Work





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Thank you.

**Contact me at
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