




PROGRAM A

→ **FIRE WEATHER AND FIRE DANGER**

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PROGRAM A : Fire Weather and Fire Danger

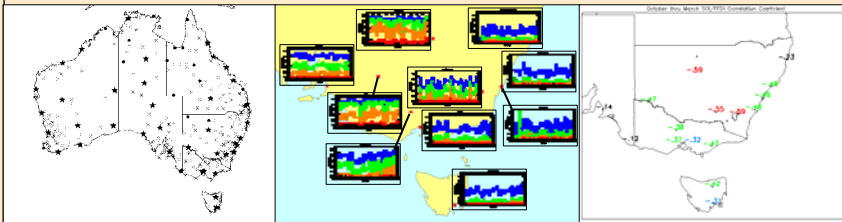
→ **Basic projects**

1. Seasonal fire weather variability and prediction
2. Spatial fire weather products
3. Wind changes
4. What makes bad days really, really bad?

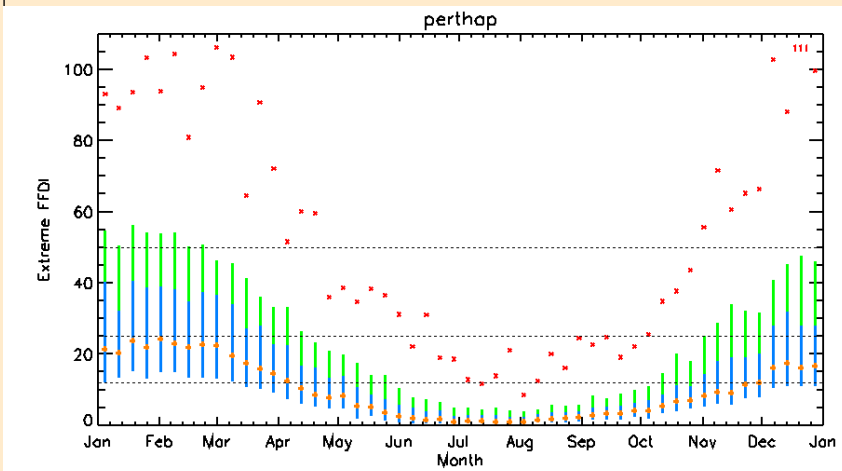
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→ Seasonal timescales

1. Historical fire weather record
2. Climate change report
3. Analysis of seasonal fire weather variability
4. House loss project
5. Seasonal bushfire assessment workshop



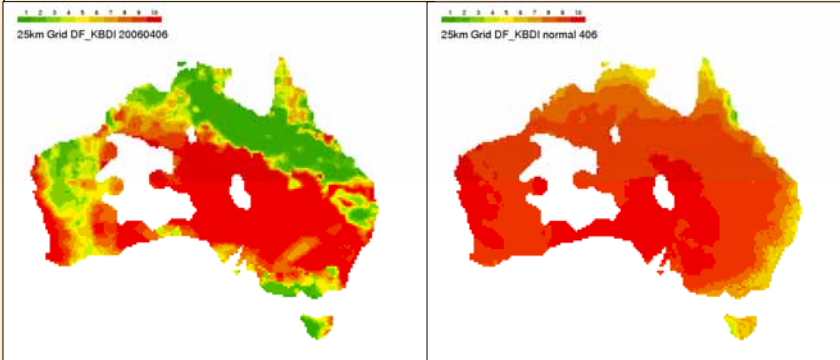
→ Annual variation in FFDI



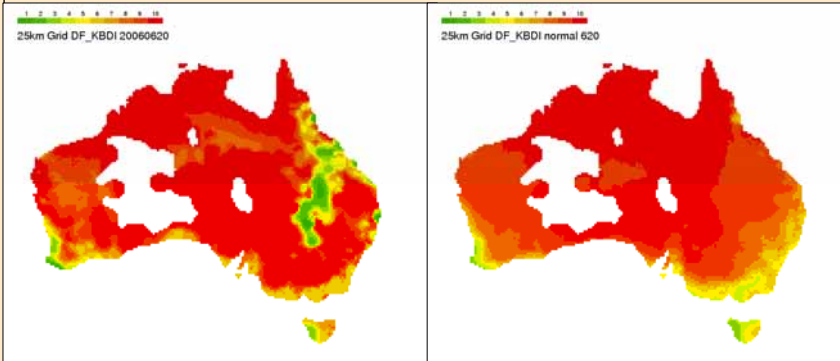


Spatial Products

1. KBDI/SDI, DF(KBDI)/DF(SDI) and normals
6 April 2006
Normal for 6 April



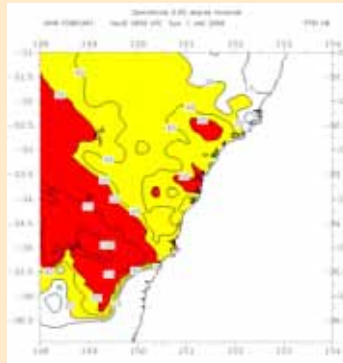
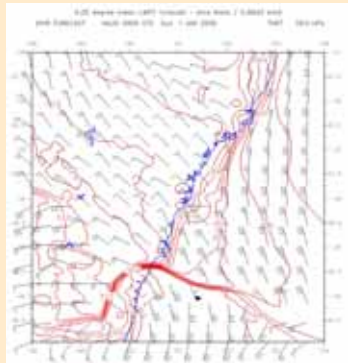
1. KBDI/SDI, DF(KBDI)/DF(SDI) and normals
20 June 2006
Normal for 20 June





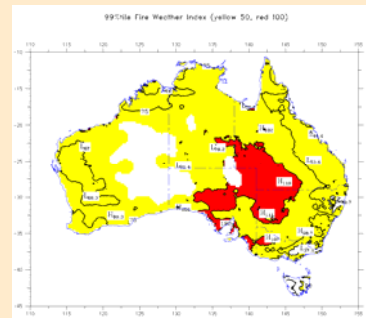
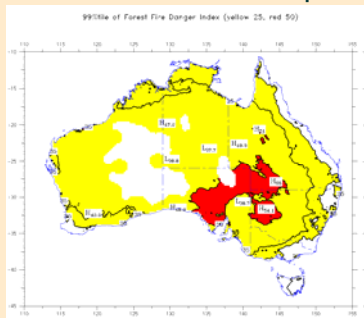
Spatial Products

1. KBDI/SDI, DF(KBDI)/DF(SDI) and normals
2. Gridded NWP forecasts (5km, hourly)



Spatial Products

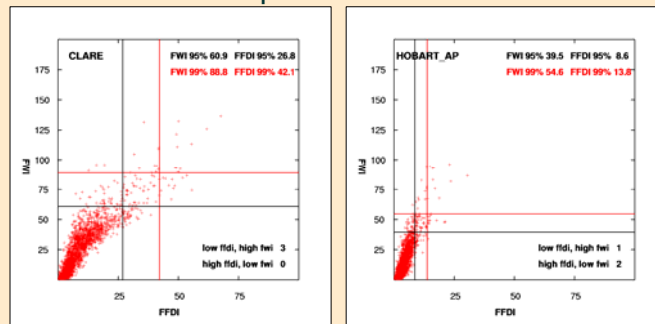
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2. Gridded NWP forecasts (5km, hourly)
3. FWI/FFDI comparisons



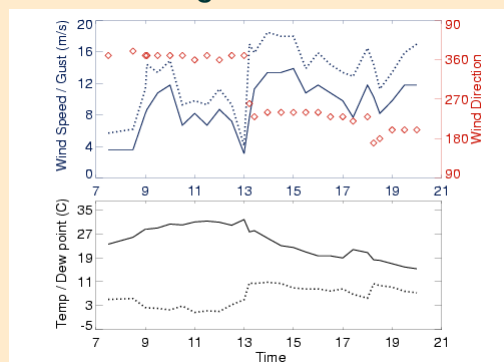


Spatial Products

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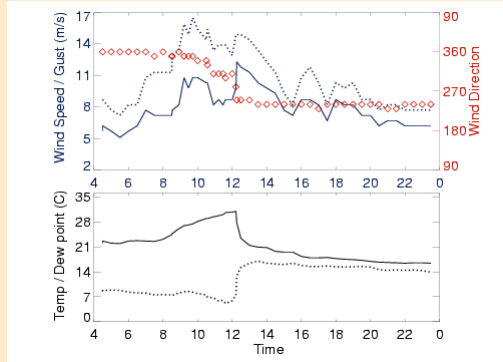
Wind changes



Easy timing, strong winds after change
Melbourne, 11 January 2002



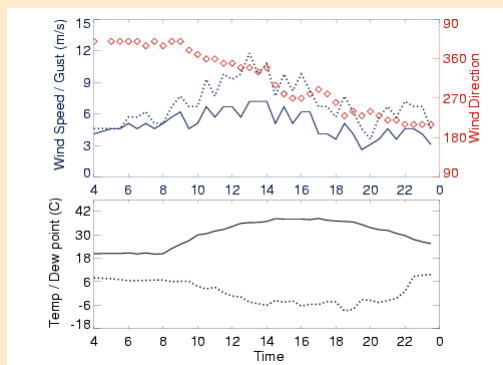
Wind changes



Less abrupt,
Port Fairy, 18 March 2002



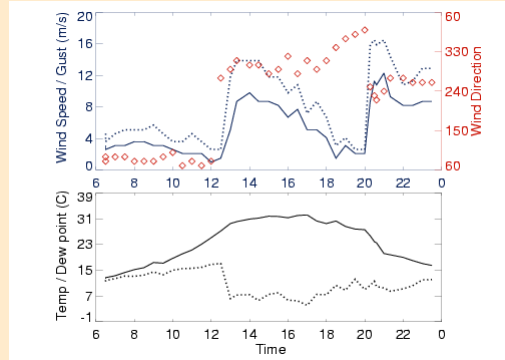
Wind changes



Long change period
Mildura, 18 March 2002



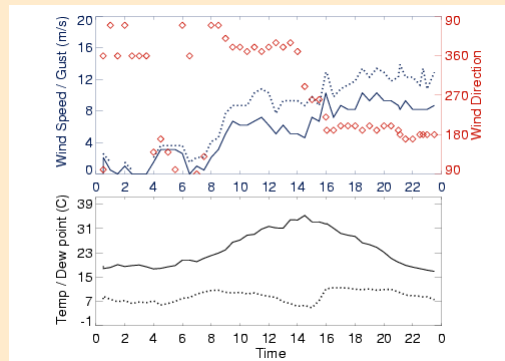
Wind changes



Multiple changes (inversion breaking)
Latrobe Valley Airport, 29 December 2001



Wind changes



Multiple changes (pressure surge)
Shepparton, 14 January 2003



Wind changes

1. Timing algorithms
2. Start and end times - change period
3. Measures of strength of change
4. Wind change climatologies
5. Non-frontal changes of significance
6. Methods of stratification - pressure phase
7. NWP model evaluation
8. Mesoscale wind variations
 - Wilsons Promontory



What makes a day really, really bad?

1. Ash Wednesday - deep front climatology
2. Alpine fires cases
 - gusts
 - drying linked to mid-troposphere
3. Cute stuff - "the Winchelsea Convergence"
4. Surface drying studies:
 - easterly changes in SE NSW
 - Wangary case
 - model/profiler studies of SA changes
 - general "conditions leading to.." study that will provide forecast guidelines
5. Other cases as opportunity offers