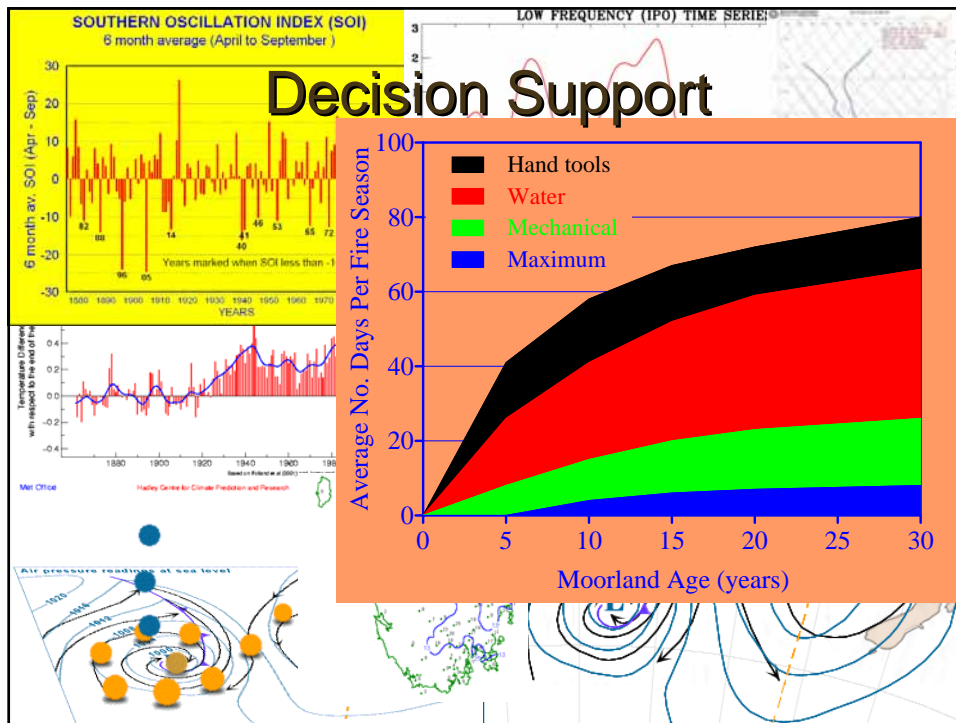


# DECISION SUPPORT MECHANISMS FOR FIRE WEATHER AND FIRE BEHAVIOUR

Mark Chladil  
Tasmania Fire Service  
Bushfire CRC Fire Managers'  
Research Meeting 2006

## Decision Support

- Fire Management Decisions:
  - Safe, Timely, Dynamic, Effective and Efficient
- Needed for the full range of management activities:
  - P P R R
- Risk Management:
  - Qualitative replaced by quantitative
- Where are we now? Soon? Later?



## Existing Research Uptake

- Variable expertise among incident planners and those responsible for fuel management and community safety activities
- Limited training opportunities above the basic Competencies
- Few fire behaviour/ weather analysts
- Uneven service provision and resources in regions

## Coming Over The Horizon

We need to:

- Assimilate more remote sensing products for fuel moisture, fuel state and fire starts with operational systems
- Deliver fire weather products spatially
- Provide forecasts with probabilities
- Provide forecasters with field observations

## What Next? – 1

By 2015 we want tools like:

- Spotting models for fuel type and state and weather conditions
- Radiation profiles and characteristics of fire fronts
- Moisture and fuel state data capture
- Fire growth models integrated into standard forecasting systems

## What Next? – 2

By 2015 we want :

- Fire behaviour analysts informing P P R R
- Application of fire behaviour and fire weather knowledge to the management of ecosystems and climate change
- Quantitative risk management
- Good outcomes: Safe, Timely, Dynamic, Effective and Efficient!