LANDSCAPES & POLICY hub

National Environmental Research Program

Fire Masterclass

Biggest Challenges

Bec's biggest modelling challenges

1. Mismatch between our tools (projections) and our need for predictions
2. Using trends to provide useful indications of change on the ground
3. Attempting to model non-linear, threshold changes

Hamish's biggest modelling challenges

1. Asking intelligible questions
2. Making intelligible interpretations cf evaluation
3. Marrying science and society

Matthias biggest modelling challenges

1. How to conceptualise ecosystem structure and function using 0.05°x0.05° grid cells?
2. How to best use uncertainty (or data distributions) in modelling
3. How to best combine top-down approaches (e.g. climate constraints on fuels and fire) and bottom-up approaches (e.g. vegetation modelling)
4. Determine spatiotemporal variation in the relative strengths of climate-fuel-fire interactions

Ross' biggest modelling challenges

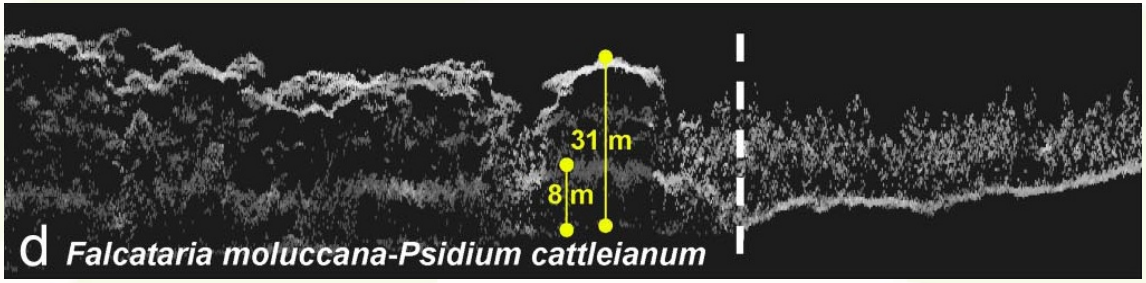
1. CO2
2. Lightning & people
3. Re-arranging the vegetation/fuel furniture – see above but everything else!

Dick's 3 biggest modelling challenges are?

1. Trajectories in general
2. The next 5-10 years in particular
3. Projection signposts

Phil's 3 biggest modelling challenges

1. Fuel structure inputs
2. Species descriptors
3. Plant moisture per species



Asner *et al* (2008) Invasive plants transform the three dimensional structure of rainforests. *PNAS* **105**(11), 4519-4523

Dave's biggest modelling challenges

The need for 'Dynamic Pyrogeography Models' (DPMs)