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Two years of FTIR soil flux measurements in the Wombat Forest Preliminary results



Benedikt Fest

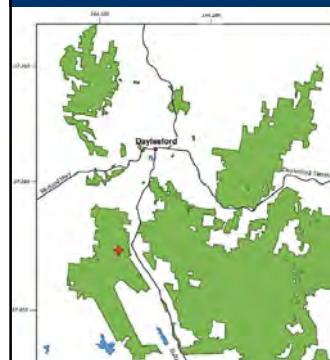
Department of Forest and Ecosystem Science

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Wombat Forest Flux





Wombat Forest Flux

Equipment on site

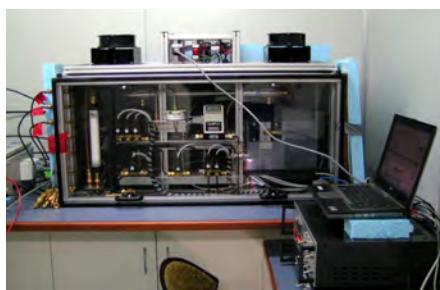
- Eddy Covariance Flux tower
- 'mobile ecosystem greenhouse gas analyser' (MEGA) – chamber system:
 - 6 automated soil respiration chambers
 - FTIR spectrometer
 - mobile field laboratory
- 3G wireless modem
- automated remote area power system
- site fenced and secured



Wombat Forest Flux

Fourier Transform Infrared (FTIR) Spectrometer

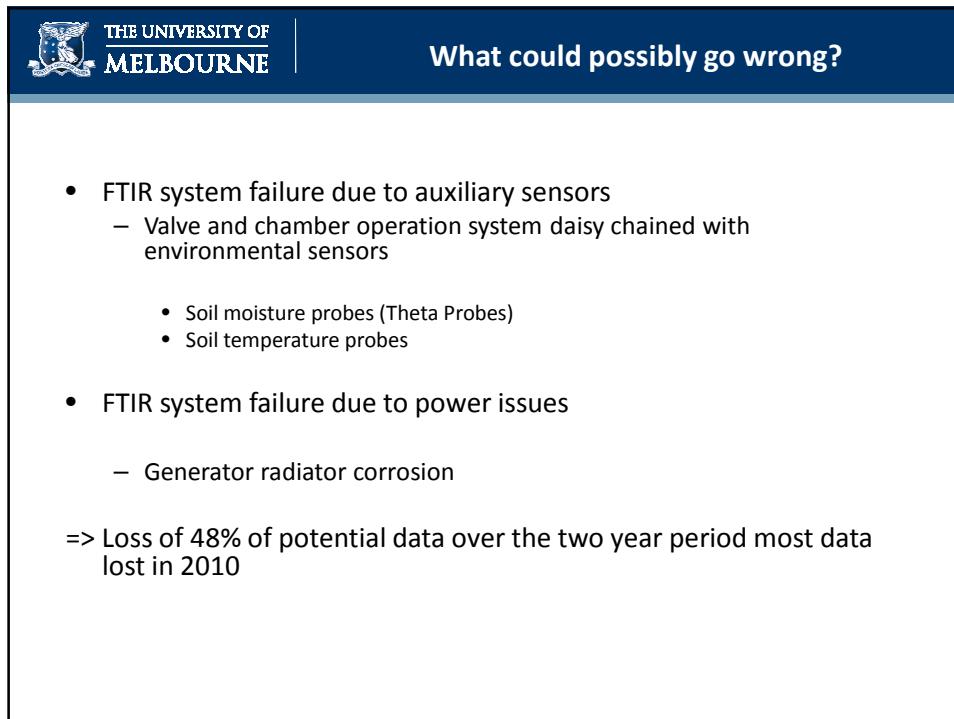
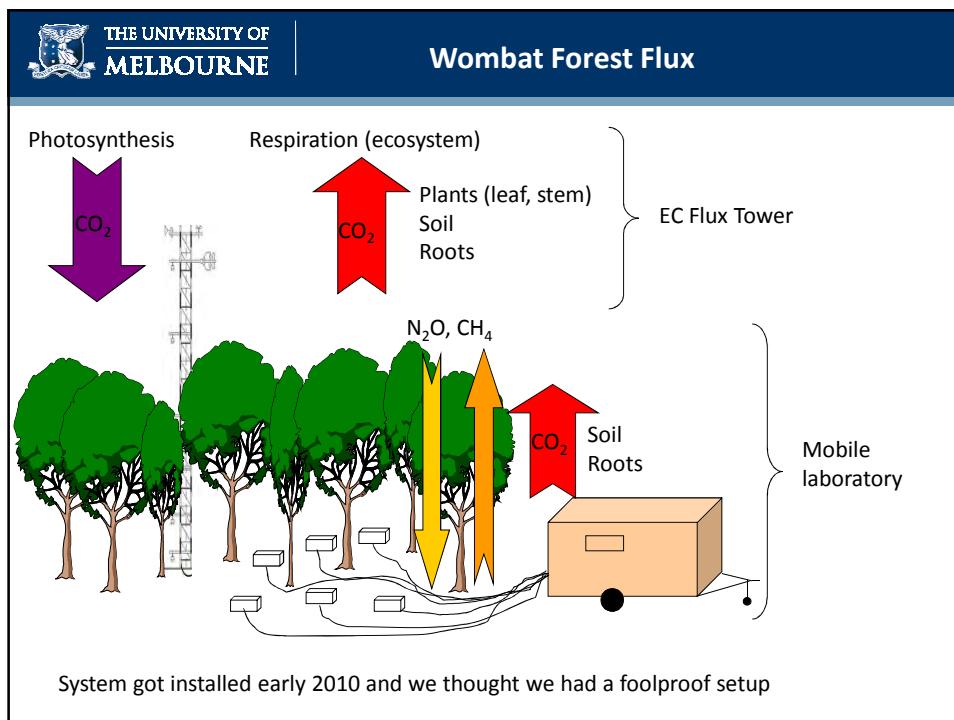
simultaneous measurement and on-site analysis of:

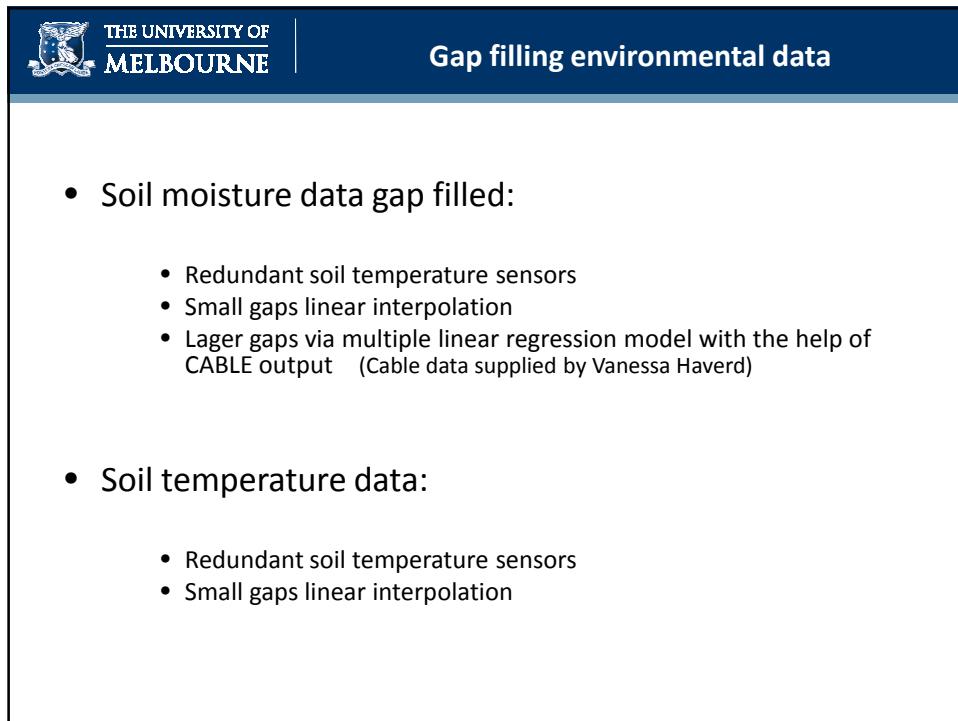
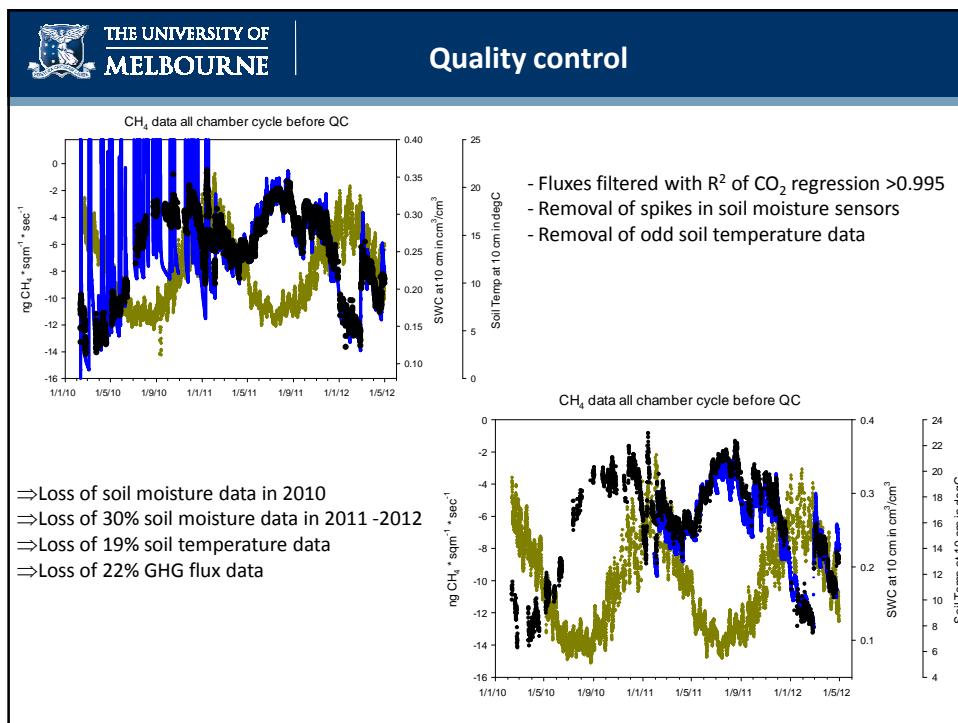


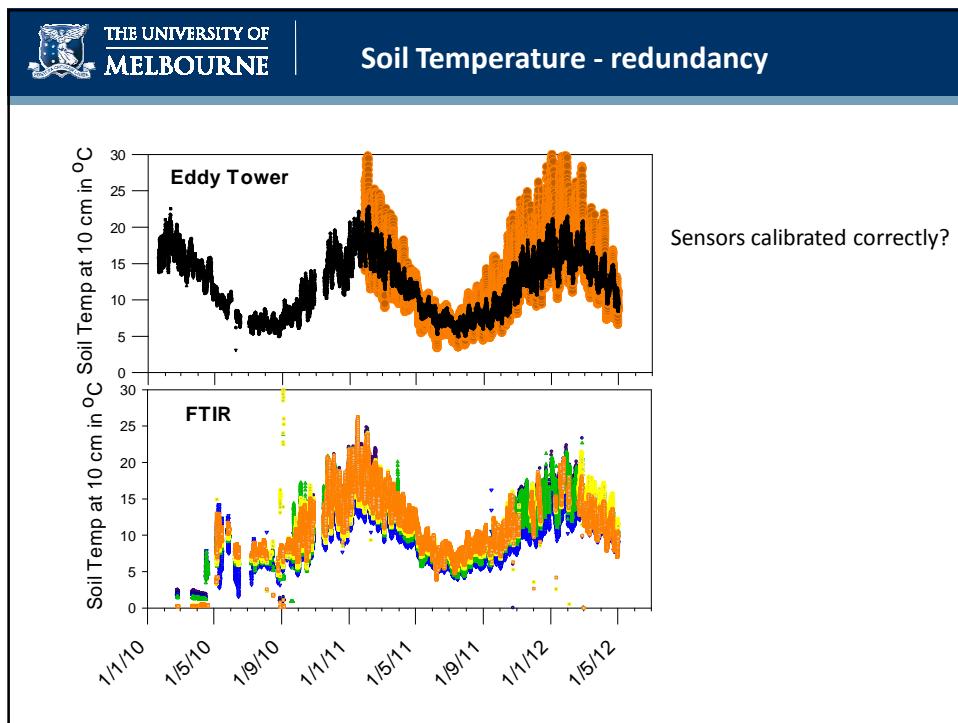
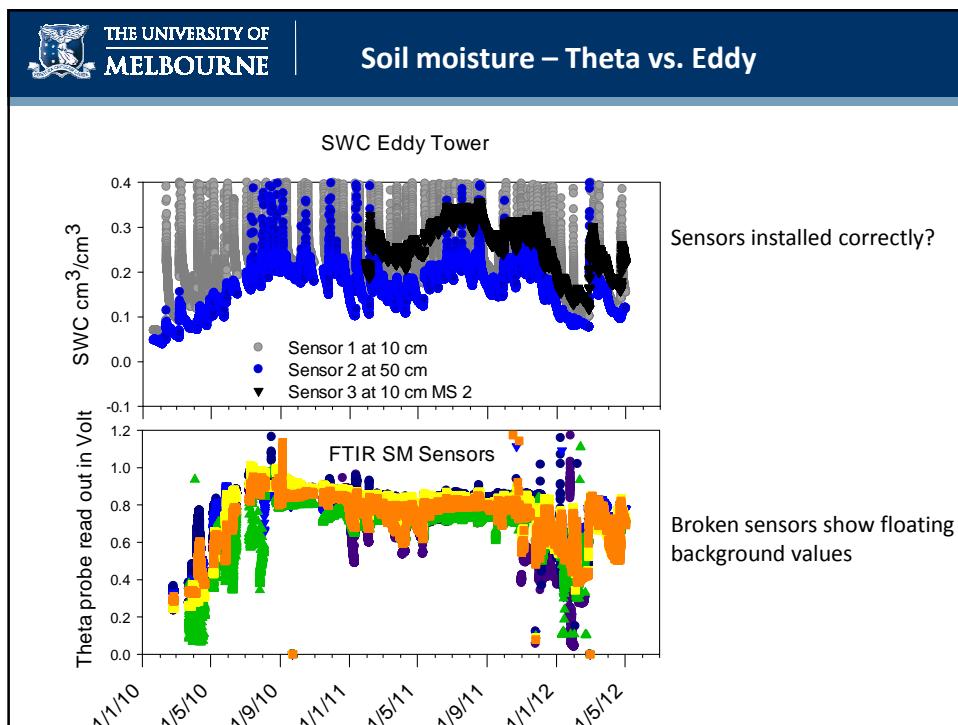
- soil derived GHG: CO₂, CH₄, N₂O
- soil temperature and
- soil moisture

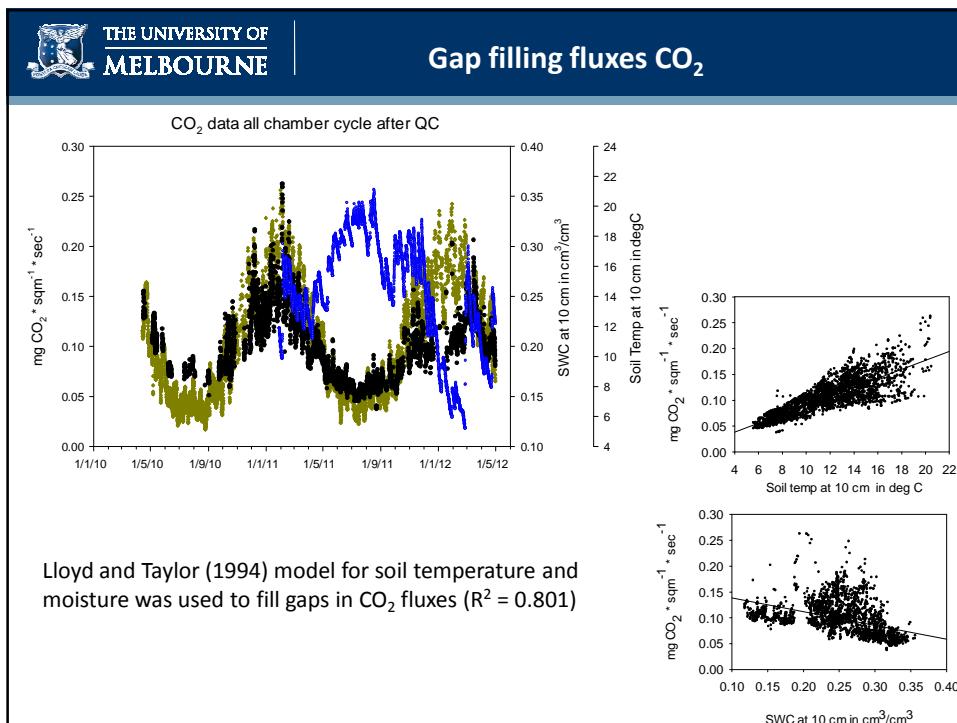
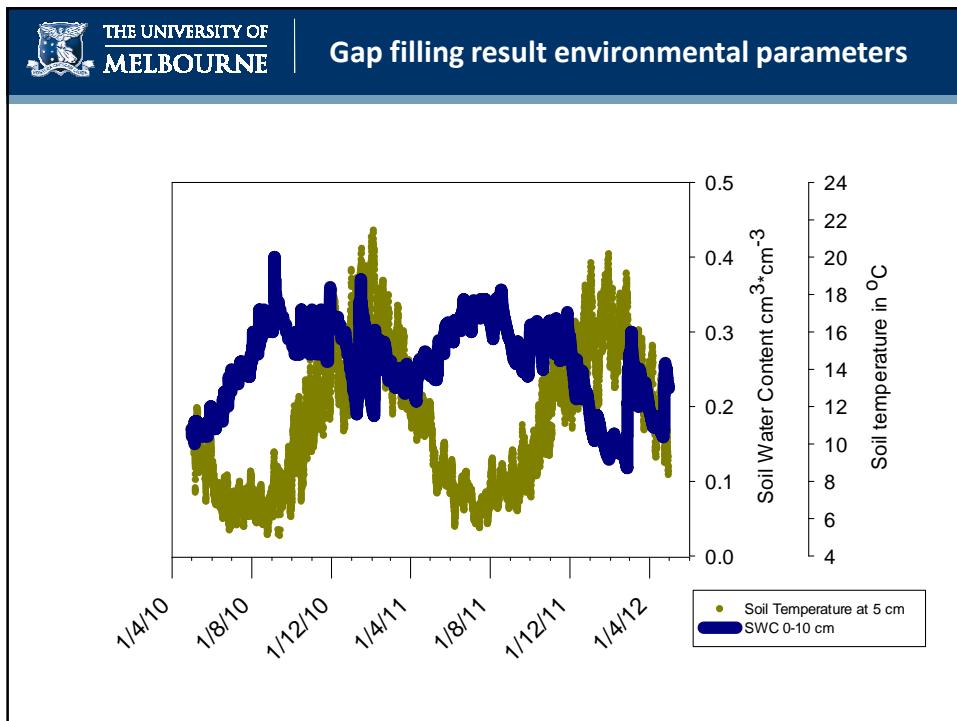
continuous measurements with high precision and high temporal resolution:

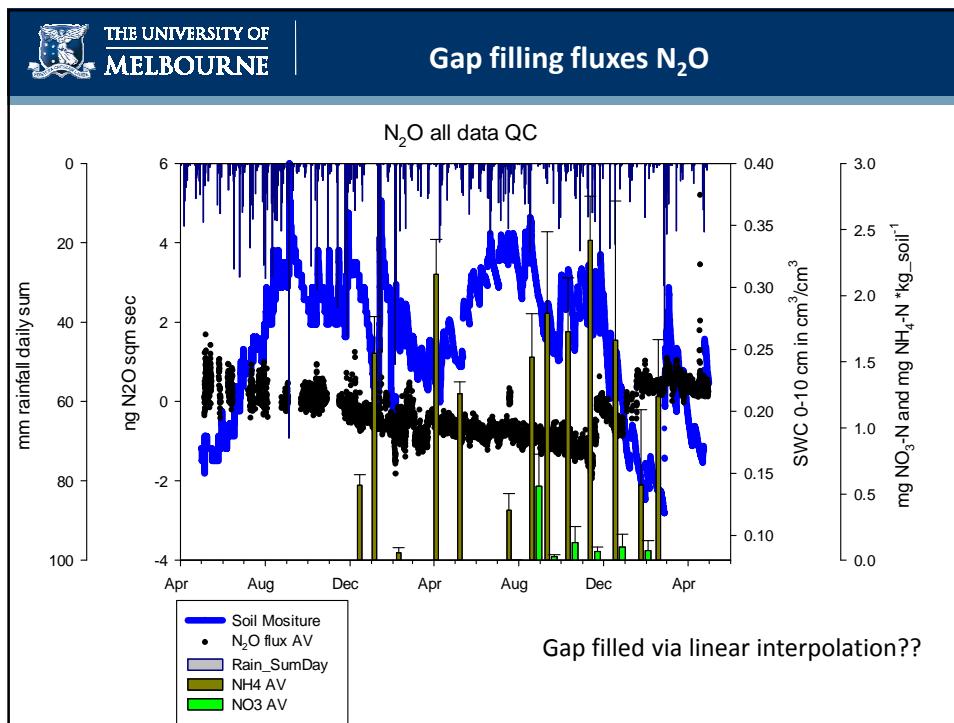
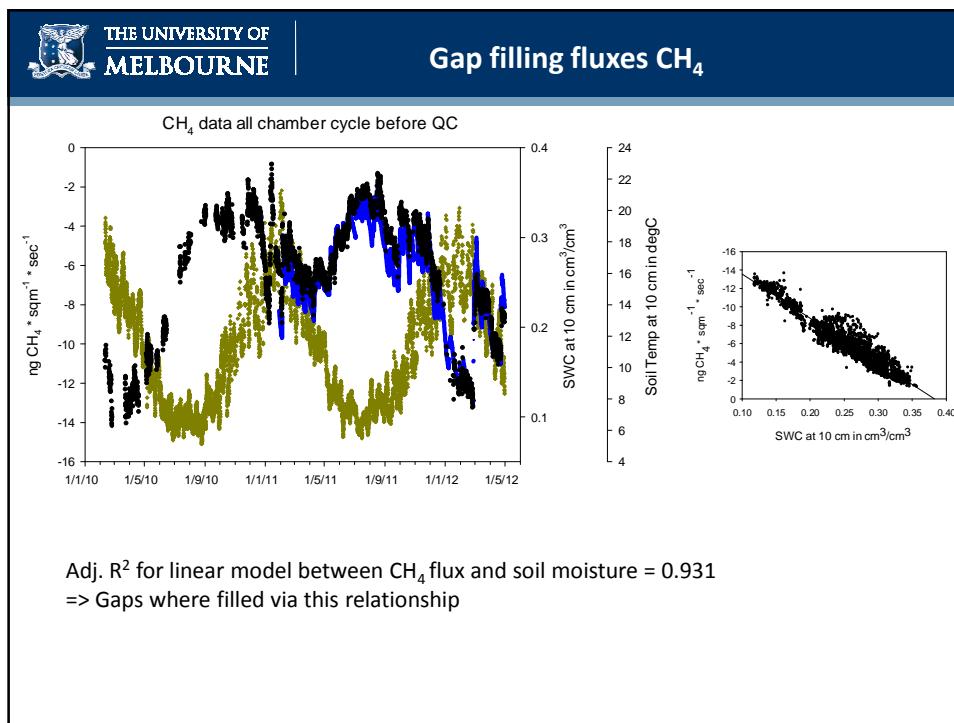
- data point each minute
- each chamber is measured
- 16 times at 15 min per day (2010)
- 12 times at 20 min per day (from 2011)

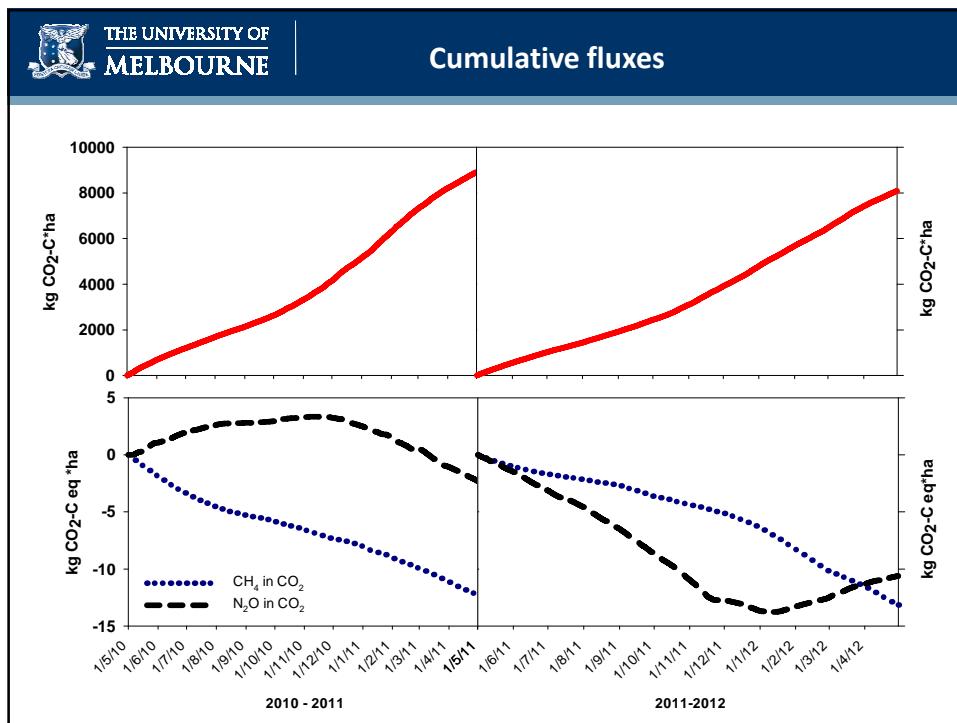
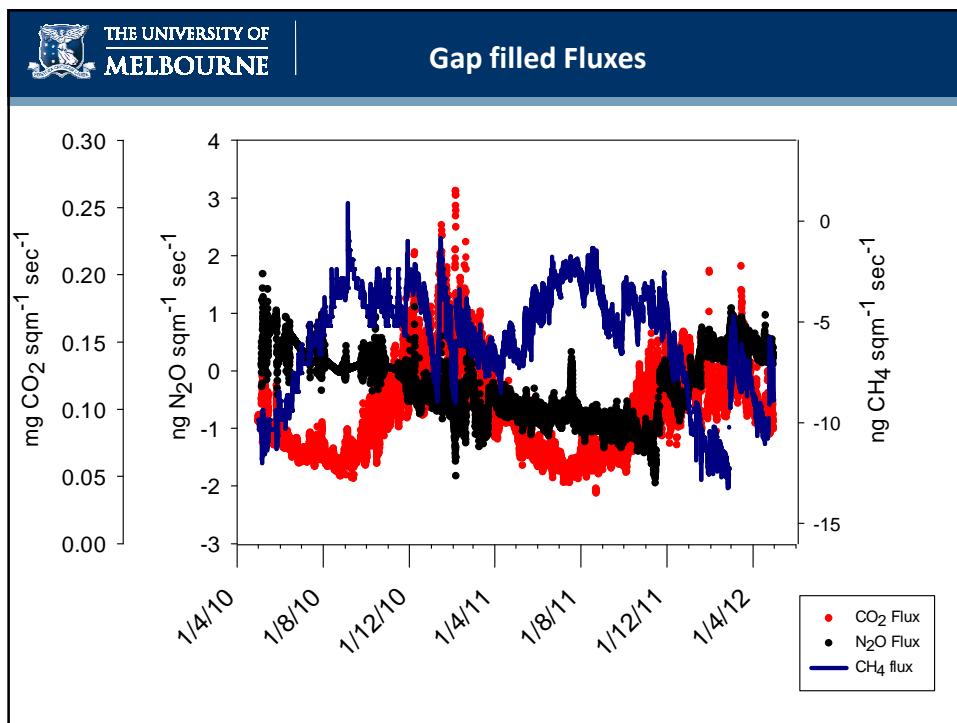


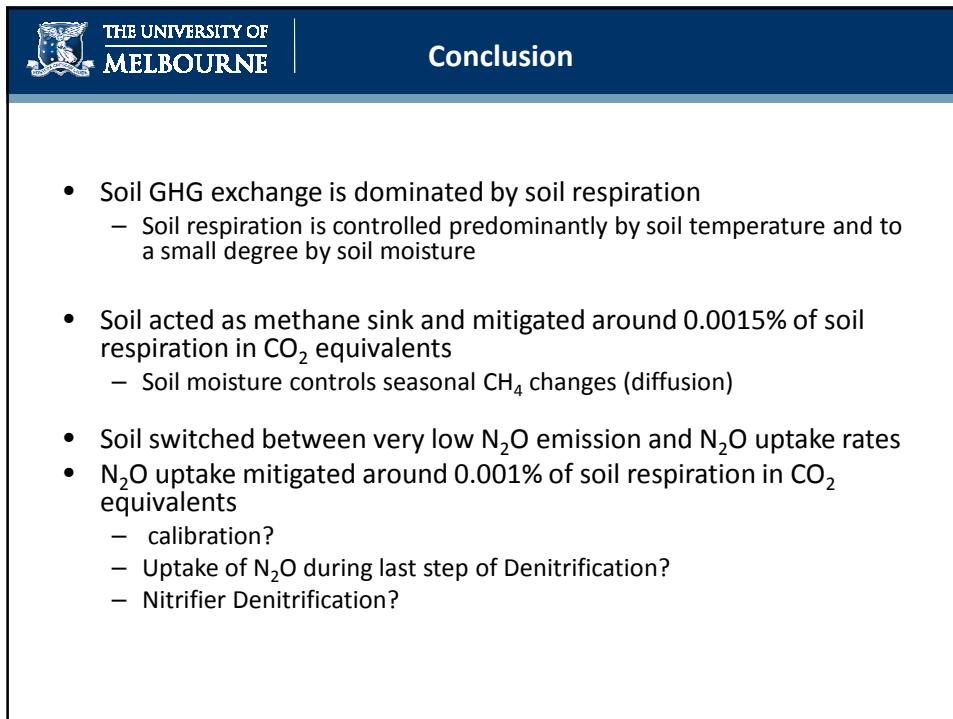
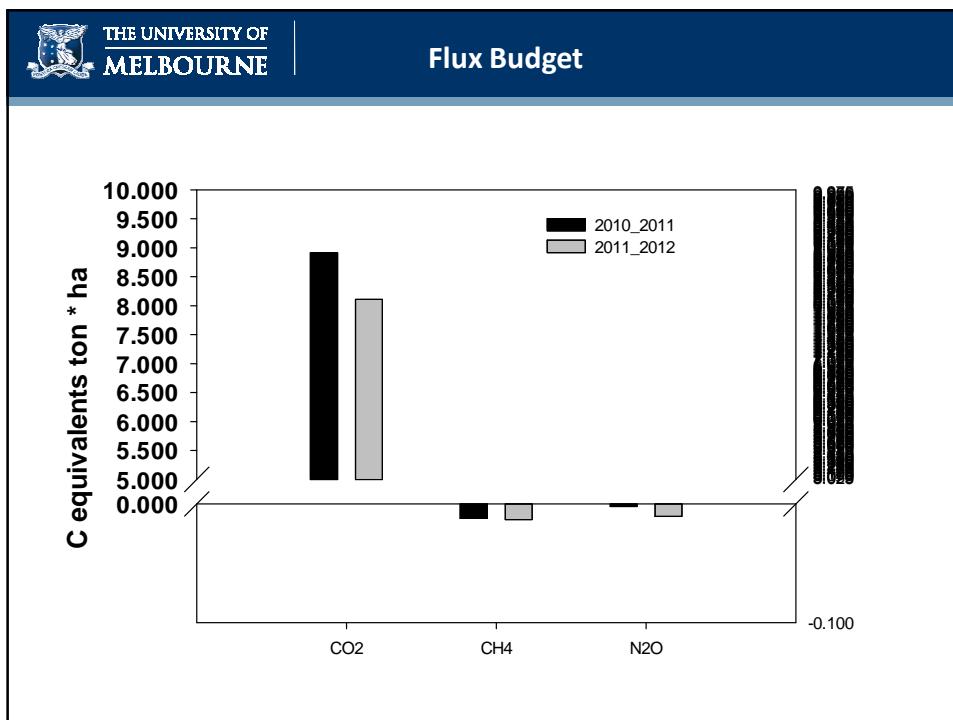




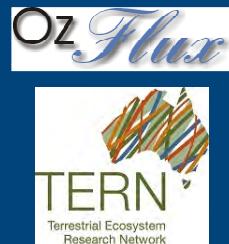








Thank you very much!



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