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EU rejects UK bid to avoid air quality targets  
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## **Technical Articles**

## 19 **J. Loveday, A. Cook and P. Franklin**

### **Exposure of seniors with respiratory disease to unflued gas heaters and their emissions**

The aim of the current study was to determine the exposure of elderly patients with existing respiratory disease to combustion gases from unflued gas heaters (UFGH). From a questionnaire study, 50% of patients with COPD used an UFGH as their major heating source. Similarly, 46% of the asthmatic subjects had an UFGH. Nitrogen dioxide concentrations were significantly elevated in homes using UFGH. However, the presence of UFGH did not affect formaldehyde or VOC concentrations.



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## **Deadlines for Copy**

Closing date for finalised editorial material is first day of the month prior to month of issue.  
Six weeks may be required for refereeing of Technical Articles.

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## Technical Articles continued...

### 24 **T. Appelhans and P. Zawar-Reza**

#### ***A modelling study of particulate matter dispersion under dominant surface wind regime modes in Christchurch, New Zealand***

Two common modes of surface wind conditions are observed in Christchurch during evenings of high pollution days. Low level flow during the evening hours with generally low wind speeds is dominated by either a north-westerly or a south-westerly wind direction. Results from TAPM simulations of dispersion indicate that north-easterly flow opposes north-westerly to westerly drainage flow from the Southern Alps and traps pollutants over the city for an increased period of time and therefore delays flushing by a few hours.

### 29 **P. Hurley**

#### ***The sensitivity of annual pollution statistics to modelled year and implications for environmental assessments***

The results shown in this paper for a generic point source indicate that there are varying degrees of sensitivity and inherent uncertainty in modelling annual statistics of ground level concentration for a single year. The annual average and the annual 9th highest hourly-averaged concentration prove to be reliable statistics within reasonable confidence intervals for a one year simulation. However, the annual maximum hourly-averaged concentration has a large bias towards over-prediction and much larger uncertainty due to year-to-year variability, when compared to the equivalent statistic modelled over a longer period (e.g. 12 years).

### 33 **New Members For July To December, 2009**

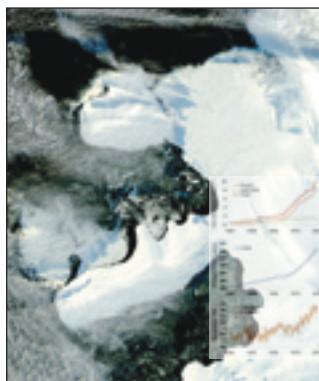
### 34 **Future Conferences and Short Courses**

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## OUR COVER

Wilkins Sound (Antarctica) ice bridge collapse (just above the word "dispersion") which occurred in early April, 2009. The satellite photo is courtesy of Earth Observatory, US NASA Goddard Space Flight Center. Superimposed are the latest graphs of carbon dioxide emissions, carbon dioxide concentrations, and global temperature anomalies compared to 1951-1980 average. The graphs are courtesy of Dr Michael Raupach, CSIRO Marine and Atmospheric Research. The controversy is, did global warming cause the ice bridge collapse?

Presented in honour of COP15.



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