

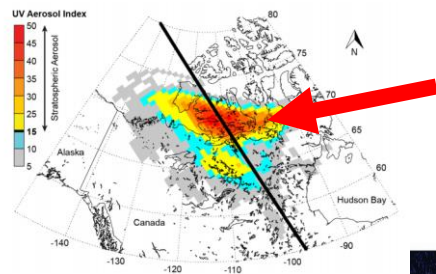
IASI observations of pyrogenic species during the 2017 Canadian boreal wildfire season

David Moore¹, Jeremy Harrison¹, Richard Pope²

(1) National Centre for Earth Observation, University of Leicester, UK. (2) National Centre for Earth Observation, University of Leeds, UK

- 2017 saw the largest number of fires ever recorded in British Columbia, Canada [$\sim 13,000 \text{ km}^2$ burned]
 - These fires drove severe thunderstorm activity - Linked to direct injection huge amounts of aerosol and trace gases into the lower stratosphere, to an altitude of $\sim 13 \text{ km}$. These enhancements in aerosol/trace gases were observable from satellites for at least a week after the event.
- A one-step retrieval scheme, developed by the NCEO, was used to quantify total column amounts of volatile organic compounds.
- Initial comparisons to TOMCAT model data show a significant underestimation of the model CO and C_2H_4 to the IASI measurements.

POSTER #16



Large amounts of smoke and aerosol particles over Northern Canada after 12th August “eruption” from multiple PyroCb during the Chisholm fire, Alberta

