



Tropospheric ozone production from forest fire emissions: p-TOMCAT model simulations with aircraft measurements from the ITOP / ICARTT campaign

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In the summer of 2004 forest fires in Alaska and Canada emitted large quantities of CO and other tracers which were then advected over North America, the North Atlantic and Europe. Here as part of the NERC ITOP Project the Cambridge global model of atmospheric chemistry and transport p-TOMCAT uses new estimates of the global biomass burning emissions during May to August 2004 to simulate the additional production and loss of Tropospheric Ozone. The results are compared to measurements of Ozone from 3 research aircraft in the ITOP / ICARTT Campaign, the American DC8, the UK BAe-146 and the French Falcon, and with the fire emissions plus convective mixing the comparisons to the measurements are improved.