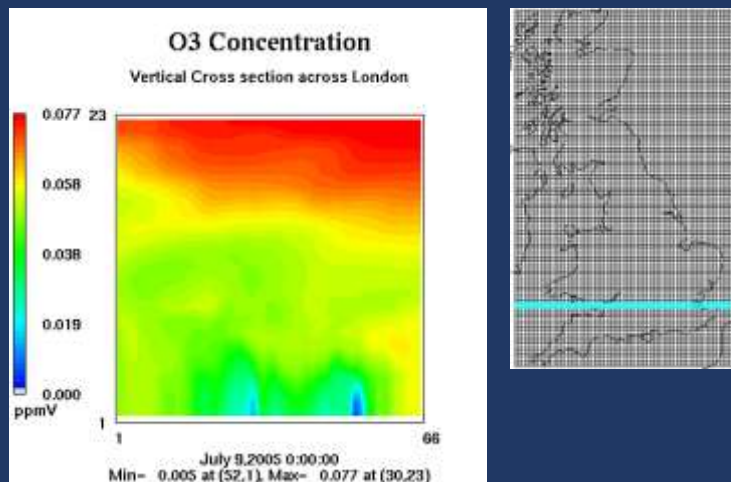


Improving Satellite Observations of Ammonia by Integrating Chemical Transport Modelling

The Current Situation: The global coverage provided by satellites provides potential for their use as a measurement tool. However, cloud cover, detection threshold and uncertainty in the vertical distribution, have limited outputs to coarse spatial and temporal resolution.

The Approach: By applying the **vertical distribution** of ammonia, determined by a **chemical transport model**, this project aims to **improve the temporal and spatial scale of satellite-derived estimates**.



Example of the 4D data output from CMAQ chemical transport model (image is of Ozone for representation purposes)

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