

United Kingdom Deriving Emissions linked to Climate Change Network: greenhouse gas and ozone depleting substance measurements from a UK network of tall towers

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Real-time, high-frequency measurement networks are essential for investigating the emissions of gases linked with climate change and stratospheric ozone depletion. These networks can be used to verify greenhouse gas (GHG) and ozone depleting substances (ODS) emission inventories for the Kyoto and Montreal Protocols. Providing accurate and reliable country- and region-specific emissions to the atmosphere are critical for reporting to the UN agencies. The United Kingdom Deriving Emissions linked to Climate Change (UK DECC) Network, operating since 2012, is distinguished by its capability to measure at high-frequency, the influence of all of the important species in the Kyoto and Montreal Protocols from the UK, Ireland and Continental Europe. Data obtained from the UK DECC network are also fed into the European Integrated Carbon Observation System (ICOS).

This presentation will give an overview of the UK DECC Network, detailing the analytical techniques used to determine the suite of GHGs and ODSs, as well as the calibration strategy used within the network. Interannual results of key GHGs from the network will also be presented.