

InGOS Halocarbon Round Robin Intercomparison (IHRRI)

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Abstract

The INGOS Round Robin Experiment (IHRRI) was conducted to document relationships between analytical procedures and calibration scales among various European laboratories and field stations that measure atmospheric greenhouse and ozone depleting halocarbon gases. This involved the production of a number of whole air samples over a range of different atmospheric mixing ratios. These samples were then analyzed at the Central laboratory at the University of Bristol and subsequently were sent to a number of laboratories across Europe where these individual cylinders were analyzed as part of a double blind round robin intercomparison. Aspects of the analysis are harmonized including common sampling lines and regulators along with common flushing and leak checking procedures. The results for a range of compounds are presented for the full intercomparison network and uncertainties are discussed.