



A new simulation chamber for the study of tropospheric iodine chemistry

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We present a new atmosphere simulation chamber for the study of iodine chemistry, particularly the release and initial atmospheric chemistry of molecular iodine emitted by exposed macroalgae, and particle formation via the formation of iodine oxides. General specifications of the chamber and chamber characterisation experiments are described. The primary analytical tool for quantifying inorganic iodine species is incoherent broadband cavity-enhanced absorption spectroscopy (IBBCEAS), which is ideal for high sensitivity in situ absorption measurements in the visible region. Early experimental results from the chamber are presented and an outline is given of future experiments planned for the chamber.