

**MOYA and *Equianos*: UK methane measurement and GHG monitoring**

E. G. Nisbet<sup>1</sup>, D. Lowry<sup>1</sup>, R.E. Fisher<sup>1</sup>, J.L. France<sup>2</sup>, A.E. Jones<sup>3</sup>, Andrew C. Manning<sup>2</sup>, N. Brough<sup>3</sup>, P. Pickers<sup>2</sup>, R. Brownlow<sup>1</sup>

1. Royal Holloway, Univ. of London, Egham, UK. e.nisbet@rhul.ac.uk

2. Univ. of East Anglia, Norwich, UK.

3. British Antarctic Survey, Cambridge, UK.

Project MOYA (Methane Observations and Yearly Assessments) is a multi-partner UK consortium supported from 2016-2020 by the Natural Environment Research Council. The project is global in scope and includes measurement, field campaigns, and modelling work: <http://moya.blogs.bris.ac.uk/project-moya-nercs-study-of-the-global-methane-budget/>. At the core of MOYA is a network of *in situ* observations. Planned continuous CO<sub>2</sub> and CH<sub>4</sub> measurement (Picarro or Los Gatos analysers) are on Ascension Is., E. Falkland Is., Halley Bay, Antarctica, and the Atlanticcrossing ships RRS JC Ross and Cap San Lorenzo. Flask or bag sampling will be carried out for CF-GC-IRMS analysis of <sup>13</sup>C in CH<sub>4</sub> from the island locations. The data archive will be located in the Centre of Environmental Data Analysis (CEDA) at STFC (Science and Technology Facilities Council). Data will be stored online and accessible to users as per the conditions of use stated above. Data will be curated and backed up according to current data centre practices. NetCDF will be adopted for all the processed data generated by the programme. *Equianos* (Equator-Inter-Atlantic-North-South) is an informal Atlantic network with partners including the MOYA consortium, Norwegian Inst. for Atmospheric Research (NILU), Finnish Meteorological Inst. (FMI) -Finland, and the S. African weather service. <http://equianos.com/>.