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The Atlantic Meridional Transect programme

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The Atlantic Meridional Transect (AMT) Programme (1995-2006) [www.amt-uk.org] aims to quantify the nature and causes of ecological and biogeochemical variability in the planktonic ecosystems of the Atlantic Ocean, and the effects of this variability on biological carbon cycling and air-sea exchange of radiatively active gases and aerosols. Marine and atmospheric data are collected from more than 14 biogeochemical provinces in the Atlantic Ocean between ca. 50oN and ca. 52oS including the undersampled subtropical gyres and the NW African upwelling.

Fifteen cruises have taken place since 1995 involving >100 scientists from 10 countries collecting measurements of >60 determinands. These data represent the most coherent set of repeated biogeochemical observations over ocean basin scales and have contributed to >80 peer reviewed publications and 36 Ph.D. theses.

This presentation will describe the scientific questions addressed and summarise the results obtained thus far.