



Heat and mass transports in North Atlantic in summers 1997, 2002, 2004 and 2006 calculated across Ovide section

C. Gourcuff (1), P. Lherminier (1), H. Mercier (1) and C. Kermabon (1)

(1) Laboratoire de Physique des Océans, Ifremer, B.P. 70, PLOUZANE, FRANCE
(claire.gourcuff@ifremer.fr)

The aim of Ovide project is to monitor the variability of water masses properties and of mass, heat and tracers transports in the subpolar North Atlantic. The Ovide trans-Atlantic section from Portugal to Greenland has been repeated every 2 years in summer since 2002, following a track close to A25 WOCE section performed in August 1997.

Transports are computed using an inverse geostrophic model constrained by direct current measurements. A significative variability is observed in transport of mass and heat between 1997 and 2006.

After measuring a quite weak heat transport in June 2002 as compared to August 1997, we observed an intermediate value in summer 2004. June 2006 was characterized by the lowest heat transport ever measured, about 0.2 PW less than 2004. The same tendency is observed for main current transports and MOC estimates. The relation between them will be discussed.