REPORT OF MR. ROLAND AZNAR SHORT VISIT TO THE NATIONAL OCEANOGRAPHY CENTRE, SOUTHAMPTON, UK, 19 - 26TH NOVEMBER 2007

From November 19th to November 26th a short visit by Mr. Roland Aznar took place in the National Oceanography Centre, Southampton, UK. The aim of the visit was to study the heat fluxes time evolution over the Mediterranean during the last decades of the twentieth century and its relationship with the oceanographic conditions, for which the awarded MedCLIVAR grant has been a valuable help to accomplish the proposed tasks.

Up to now, monthly heat fluxes values had been used to analyze this relationship, paying particular attention to the period between 1991 and 1993 when deep water formation in the Aegean Sea, known as Eastern Mediterranean Transient (EMT), was observed. Nevertheless, in this case higher frequency values obtained from a global reanalysis (NCEP) and a hindcast (HIPOCAS) databases which cover the period from 1985 to 1995 have been employed, in order to get a more detailed heat fluxes evolution. The goal was trying to determine the existence of a significant heat flux forcing timescale which could play an important role in the formation of EMT or other similar phenomena. For that purpose, spatial distributions of NCEP and HIPOCAS heat fluxes accumulated for different periods have been obtained for the offshore Mediterranean area in order to find the zones with the highest heat fluxes losses. In those areas, heat fluxes have been both accumulated and averaged for bins ranging from one to sixty days; afterwards the standard deviation has been computed for the obtained series to establish a possible relationship between variability and time periods.

The results obtained during this short visit, as well as future approaches to the undertaken study, are expected to be presented in a future MedCLIVAR session.

Roland Aznar

Madrid, 17th December 2007