

AN ABRUPT TRANSITION 7500 YEARS AGO IN THE BLACK SEA. RESULTS OF THE BLASON SURVEY (ROMANIAN SHELF)

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The north-western Black-Sea continental shelf was revisited in 1998 during the French-Romanian BlaSON survey on board RV Le SUROIT. More than 4500 km of multichannel High Resolution seismic reflection data were acquired in parallel with multibeam echo-sounding, monochannel Very High Resolution seismic and Chirp data. 38 Piston and Vibrocores were collected. The objectives were to investigate sedimentary records and processes across the Black Sea margin during Late Quaternary, in relation with climatic and sea level changes, as well as neotectonism. This area corresponds to the main depocenter related to large rivers, especially the Danube and Dniepr rivers. The Poster presents some results of the cruise. New C14 dates from cores of the Romanian continental shelf give an age comprised between 8660 ± 75 and 7650 ± 75 yr BP, for the transition from fresh water to marine condition in the Black Sea. Different hypothesis have been proposed for the connection between the Black Sea and the Mediterranean Sea; Ryan et al. (1997)¹ propose a catastrophic flood at 7500 BP, when Aksu et al. (1999)² argue for a freshwater flow from the Black Sea to the Mediterranean Sea. In correlation with EM1000 multibeam echo-sounding data recovered over dune field, Chirp sonar data present an erosional surface which origin is to be discussed. This erosional surface is correlative with the cores and with the density and magnetic susceptibility measured on the cores. All these results give substance to the hypothesis on the flooding of the Black Sea by the salt Mediterranean water.