

## **On technical aspects concerning the geomagnetic surveying at Balearic sea and Valencia trough: ZEEE Project**

M.Catalán, J. M. Davila  
Real Instituto y Observatorio de la Armada<sup>1</sup>

**A b s t r a c t:** Since 1995, the Spanish Exclusive Economic Zone Project (ZEEE) has taken place every year with one month marine campaign using the Spanish Research Vessel "Hespérides". During the first three years, a systematic surveying at the Balearic and Gulf of Valencia area (Western Mediterranean) was carried out. During the last three years (1998, 1999 and 2000) the ZEEE project has focused its efforts in the Canary Islands. The Spanish Research Vessel 'Hespérides' was used as scientific platform, registering: Bathymetry, Seismic Reflection, Gravimetry, Geomagnetism, and other oceanographic variables to complement the previous campaigns. The Hydrographic Institute of the Navy and the Spanish Oceanographic Institute act as coordinators. Other Spanish Institutions collaborate with the Project, among them the Geophysical Department of the Royal Naval Observatory at San Fernando that is in charge of its geomagnetic aspect. The main technical geomagnetic details for the 1995-1997 ZEEE campaigns are described in this paper: instrumentation, data treatment processes, as well as the evaluation of its error budget.

**Key words:** Marine campaign, Balearic sea and Valencia trough, geomagnetic data collection and treatment

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<sup>1</sup>Sección de Geofísica, Real Instituto y Observatorio de la Armada, San Fernando 11100 Cádiz, Spain; e-mail: mcatalan@roa.es, mdavila@roa.es