

Geophysical Research Abstracts,  
Vol. 10, EGU2008-A-06832, 2008  
SRef-ID: 1607-7962/gra/EGU2008-A-06832  
EGU General Assembly 2008  
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## The GO Project Cruise Seismic Data

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The European funded Geophysical Oceanography project ([www.dur.ac.uk/eu.go](http://www.dur.ac.uk/eu.go)) acquired 2000 km of seismic data over the Mediterranean Outflow Water in the Gulf of Cadiz in April/May 2007 using the NERC ship RRS Discovery. All of these data are comprehensively calibrated by over 500 XBT/XCTD casts and additional CTD casts from a second vessel, FS Poseidon, funded by the DFG. All the data was acquired simultaneously allowing direct comparison of the results and the possibility for more ambitious joint-interpretation strategies. During the cruise 3 different seismic sources were tested providing source frequencies over 5 octaves of bandwidth (10-350 Hz).

This poster displays all the seismic sections overlaid on the velocity model derived directly from the oceanographic data. Seismic waveform synthetics computed from individual XBT casts corrected for salinity variations are superimposed. There is a close correspondence between the velocity map and the seismic reflectivity. However, on closer inspection there are significant discrepancies where the correspondence is not good. These may be due to uncalibrated variables, e.g. XBT decent rate, or out-of-plane structure as the seismic image is a 2-D representation of a swath of reflectivity with a width determined by the Fresnel radius. The other first order results are: that in this area the highest amplitude reflections are associated with thin layers rather than step changes in temperature/salinity; and the imaged structure changes fast so repeat seismic sections show quite different images.