



Bringing climate science into the classroom

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The purpose of the AMOCINT (Atlantic Meridional Overturning Circulation during Interglacials) project is to better understand climate conditions during past interglacial periods through the analyses of sea floor sediments. The first AMOCINT cruise, MD168-AMOCINT (IMAGES-XVII) took place aboard RV Marion Dufresne, and its main objective, was to recover thick marine sediment sections at key locations for monitoring Atlantic Meridional Overturning Circulation (AMOC) variability. Besides the scientific work an educational program for High School teachers was conducted with the support of the French Polar Institute (IPEV) and the European Geosciences Union (EGU). Alongside the educational activities the teachers participated in every step of the process of core recovery – cutting, opening, labeling – and preliminary sediments analysis.

CASQ cores' large amount of sediment allowed the teachers to get part of it for their schools. With the help of on board scientists, the teachers developed a Lab Activity Teachers Guide with simple instructions on how to extract foraminifera from sediments and how to identify some warm and cold key species along with their students.

Back on terra firma, at Loulé, three students from the local High School 'Space and Earth Sciences Club' were introduced to marine geology and the past climate investigation. They have analyzed and studied the top 1.5 m section of core MD08-3180 collected in the Azores region. In the laboratory, these young scientists have reproduced not only the steps done by the scientists on board, but also washed and sieved the samples and learned how to identify *N. pachyderma*, *G. bulloides* and *G. ruber*, planktonic foraminifera used to identify past climatic fluctuations at that site.

Students were amazed with all they have learned from the microfossils preserved within sea floor sediments and realized that there have been significant climatic fluctuations in the past, not only in the Azores region but worldwide, and have transmitted that message to their colleagues.