# **Portugal**

Name: Vasco Mantas Country Coordinator (CC)

Organisation: University of Coimbra / CITEUC, Earth Observation

Laboratory

E-mail: vasco.mantas@dct.uc.pt



## **Organization and Number of Staff:**

University of Coimbra

## Funding by:

GLOBE Portugal is currently funded by the Earth Observation Laboratory of the University of Coimbra

**Cooperating Organizations/Individuals:** 

**GLOBE Schools (what types, how many):** 

**GLOBE** Areas you and schools focus on:

**Number of Schools Reporting Data over Past Year:** 

<u>Program Implementation, International Cooperation in GLOBE Network, and Activities over Past Year (categorized by GLOBE Strategic Plan 2018-2023 Goals):</u>

#### 1. Education

The focus of the GLOBE Program in Portugal has been to **develop and initiate the implementation of a plan to reintroduce the program in the country**. To this end, activities were designed to evaluate successful approaches that may captivate educators, students, and the public. This is part of the development of the stepwise approach outlined in the strategic plan, submitted in the past year as well.

During 2021/2022 several activities were implemented during a number of key initiatives. Such activities included **lectures and hands-on activities during the Summer University at U. Coimbra** as well as the launch of a project at the Avelar Brotero High School, Coimbra. This project will allow students to collect data while interacting with scientists and explore different approaches to understanding, monitoring, and communicating climate data. An artistic component will be explored as well, with the support of the teachers.

With the collaboration of the CESUCA (The U. Coimbra office in Alcobaça) and local authorities, the program created a **new exhibit**, **named 'Stories of a Changing World'**, which was fully funded by the eoLab (Earth Observation Laboratory of the University of Coimbra). The exhibit features testimonies of scientists from Portugal, the United States of America, and the United Kingdom,

who reflect on climate change, ecosystem degradation, and their own personal experiences. The testimonies are supported by background information on climate change and what technology, especially remote sensing, can do to mitigate it or support adaptation. This exhibit will remain open until December 2022, and will be shared with schools after that period. Activities with scientists accompany the exhibit, which has engaged hundreds of school children and members of the general public.



Figure 1. GLOBE lecture in Coimbra.

#### 2. Science

The program in Portugal conducted a review of existing materials available in Portuguese and prioritized the domains where scientists are needed to support the production of new content. It was also **established an advisory board, which includes scientists and science managers**, to provide guidance on priorities and ensure the quality of the offerings.

The development of customized solutions, aligned with existing ones, but addressing specific gaps, was considered. Such development efforts were primarily directed at land cover and atmospheric science objectives. Considering that this is the first year of activity of the program, under the new management and strategic plan, activities in the science domain were essentially exploratory.

A course to be taught at the University of Coimbra, focusing on the GLOBE experience to STEM education was also approved and is currently pending scheduling.

## 3. Community

The program is currently focused on school-oriented activities. Even though we recognize the importance of communities, the first year of the new coordination under the Strategic Plan now in force, did not include an important community outreach component. Nonetheless, in 2022/2023, this will change, through the implementation of an integrated plan designed to engage schools and the community through thematic packages.

#### 4. Technology

The program did not focus on technology-related activities in the past year. However, the advanced visualization and data discovery solutions being considered, and described earlier, have strong technological components.

#### 5. Communications

The program centered communications around **B2B meetings for the development of a network of partners** who could support the introduction of activities at schools and other organizations. Additionally, the Exhibit 'Stories of a Changing World' is a major communications piece (including its virtual twin). It is visited by hundreds and will become an itinerant exhibit in January 2023, potentially reaching thousands across the country. The online component, a story map that replicates the content of the entire exhibit is available to a global audience (contents in English).





Figure 2 and 3: The exhibit Stories of a Changing World, currently in Alcobaça.

## **Plans and Ideas for Next Year:**

In the next year, the program in Portugal will consolidate its footprint across the country. The team will focus on expanding the core members in the coordination (i.e. appointment of a deputy coordinator) and ensure diverse leadership. Furthermore, the program will steer activities towards the recruitment of new schools and educators in accordance with what is outlined in the Strategic Plan. Thematic areas, currently being reviewed by the coordination, will be selected, in order to align the GLOBE experience in Portugal with the educational and scientific priorities of the country and the need to reinforce trans-Atlantic relations. Specifically, the emphasis will be on the development of relevant materials in close collaboration with scientists, complete and scale activities already underway in several schools, training trainers, and reinforce ties with other GLOBE countries. Activities leading to increased diversity, equity, and inclusiveness will take center stage. The Strategic Plan will continue to be the essential document for the design and implementation of new activities.