

# CLIMATE DETECTIVES 2021 — 2022



Salvemos el pinsapar IES Fernando Savater

## **RESEARCH QUESTION**

How is the Spanish fir (Abies Pinsapo) in the Sierra de Grazalema and Serranía de Ronda responding to climate change?

#### **SUMMARY OF PROJECT**

Figure 1:

The Spanish firs of the Sierra de Grazalema and the Serranía de Ronda, one of the most unique ecosystems in southern Europe, are registering a movement towards higher areas of the mountain, according to a study carried out by the universities of Córdoba (UCO) and Granada (UGR), which has made it possible to verify how the 'Abies pinsapo Boiss' species has begun a movement at altitude to avoid its extinction.

The reason why they move is because they are looking for more favorable environmental conditions in a context of climate change.

We want to verify this last statement by doing our own research.

#### **MAIN RESULTS**

Figure 3:

In the data of the normalized vegetation index of the last five years, a good state of the fir forest is observed, with a high degree of humidity throughout the year, and especially high in the winter months.

According to a study carried out by the universities of Córdoba (UCO) and Granada (UGR), the growth of the forest is registering a displacement towards higher areas of the mountain. This has allowed the 'Abies pinsapo Boiss' species to maintain good temperature and humidity conditions.



Figure 2: Poster of our research (in Spanish)

### **ACTIONS TO HELP LESSEN TO THE PROBLEM**

We intend to visit the pinsapar to check if it is true that it is growing in the upper area and decreasing in the lower area.

Later we will show the results to the educational community, participating in a science fair. We will try to make people aware of this environmental problem.