

# Chapter 1

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## *Visiting the National Observatory of Athens*

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### *Summary*

- A field trip in the National Observatory of Athens took place on March 15<sup>th</sup> 2018, in order to have there an outdoor geography lesson and participants were 35 students from classes C and D. The National Observatory of Athens is a research institute , founded in 1842 and it is the oldest research foundation in Greece and one of the oldest research institutes in Southern Europe. The aim of the visit was for students to see all the instruments used in the Observatory and understand their function in order to gain a deeper knowledge of the science of astronomy and its connection to geography. Furthermore students had the opportunity to learn about the two century long history of Greek Astronomy.

### **Name of the activity**

Visiting the National Observatory of Athens

## **Introduction**

This is an interesting activity for the students, as they have the opportunity to see and understand unique instruments and learn a lot about astronomy as well as the movements of the earth. In addition it is a visit in an important and historical building and institution in our city.

## **Learning objectives**

- Learn about astronomy.
- Learn about the two century long history of Greek Astronomy.
- Explore the Geostrophysics Museum and the library of the Observatory.
- Observe a variety of scientific instruments of the 20th and 19th century.
- Examine from close by the first optical telescopes of Greece.
- Understand how an observatory works.
- Contribute to the implementation of the European project

“Outdoor Learning – Real Learning”

## **Resources**

Maps, scientific astronomic instruments , telescopes.

## **Activity**

### **Step 1:**

We visited the National Observatory of Athens and had a guided tour. We saw the Starke 9 telescope, which was bought in 1846 and is the first telescope used in Greece. We also visited the library and saw scientific instruments used in the previous century.

### **Step 2:**

We saw the original 16cm telescope housed under the dome of the Sina's building, used by the NOA (1858-1884), in order to draw the most accurate map of the Moon during that period.

### **Step 3:**

We saw the 16cm meridian refracting telescope, constructed in 1896 and used continuously up until 1964 to measure the transit times of stars across the local Athens meridian, thus calculating the official time of Greece. Then each student saw the Caryatides through the floor standing binoculars Carl Zeiss – Asiola 60mm, overlooking the Acropolis hill.

### **Step 4:**

We saw the Doridis telescope and observed the Athens sky from the opening dome of the building.

### **Comments from the learners' surveys**

Student seemed happy and made a lot of questions during the visit. They said they were impressed by the telescopes and they learned about the way people used to study about the planets and time in the past.

### **Final remarks**

It was nice to see students being interested in the topic and they were able to realize how this knowledge affects our everyday life. Most of them had never seen a telescope before or through it , so they were excited about that. Overall it was a successful visit as students were able to understand better the use of telescopes and other instruments as well as their evolution in time.

### **Supplementary material**

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<https://www.youtube.com/watch?v=M4Auo0RPAkw>

<https://www.youtube.com/watch?v=BzKZvn-XYIw>

[https://www.astro.noa.gr/gr/visitorcenter/documents/VC\\_Thissio\\_sm\\_gr.pdf](https://www.astro.noa.gr/gr/visitorcenter/documents/VC_Thissio_sm_gr.pdf)