
My NASA Data - GLOBE Connections

Sea Level Rise: GLOBE Student Project Spotlight

Garonne, a River Under Surveillance Project Overview: We have chosen to study the problem of climate change on the hydrological cycle of the river that crosses our city: the Garonne. First of all, we have been sensitized to this problem through the Adour Garonne file entitled "Garonne 2050", which warns about global changes in the Garonne basin, and on the need to monitor the water level in the Garonne. As a first step, in order to verify the hypothesis of climate change, a group of students carried out a statistical analysis of climate data for the Toulouse agglomeration using data available on the website called of info-climate and GLOBE data from our weather station. CNES's Earth Observation Space Missions enable the acquisition of very important data to understand the climatic machine that forms the water cycle. A group of students studied the operation of the Jason 3 altimeter satellite. Then, to monitor the Garonne level, and to check the satellite in-situ data, two groups of students conducted a project to construct a water level sensor using two different technologies. One group chose to use a pressure sensor to measure the water level and the other one chose to use an ultrasonic sensor. **(Grades 6-8-College Jules Valles)**

Research Poster [Link](#)



The Meuse Explained

Wolfert Tweetalig Grades 9-12

Project Overview: In this research paper, the correlation between weather conditions in the Langres Plateau and the velocity, river flow and salinity of the Meuse, which has its origin in the Langres Plateau and flows into the North Sea near the city of Rotterdam. Data from a website called Meteoblue and data from the Rijks watershed are compared and contrasted to see how they influence each other. Velocity is measured for this research paper. Furthermore, the pH-levels of the Meuse are also looked at by measuring them via the Globe Protocols. By looking at the collected data and by researching natural processes regarding the hydrological cycle and the formation of rivers, it is concluded that the hypotheses are correct to some extent, as the effect of precipitation cannot be measured in isolation, causing the report to not be fully accurate. It is also concluded that precipitation is one of the many factors that influence a river's characteristics, and in itself does not have a major effect on the Meuse.

Research Report: [Link](#)

Sphere(s)

- [Hydrosphere](#)

Phenomenon

- [Sea Level Rise](#)

Document Resources

Document Resources

- [Student Poster](#)
- [Student Paper](#)