GOSA HATALOM

Our team – HATALOM of Opatov Grammar School from the Czech Republic – consists of six students and one physics teacher. We simulate landing on another planet in order to find evidence of life.

Our satellite is capable of autonomous flight and landing at a preselected location. During the flight, our satellite measures the amount of oxygen, ozone and carbon dioxide in the atmosphere. It also measures basic physical quantities such as temperature, pressure or humidity plus all the data necessary for the navigation to be accurate - acceleration and position.

Furthermore, the satellite measures radiation of a parent star in the visible, IR, UV and gamma ranges and the strength of the magnetic field. These readings help us to determine whether the planet can be habitable. After landing, the satellite will take a sample of the soil which will be subsequently tested for the ability to sustain life. All parts of the mission will be recorded on an on-board camera as well.

Up-to-date information about the project including diagrams of flight data can be found on our website www.gosa.cz (also in English). To make it more fun, we have also placed all the information on our Facebook page and Youtube channel, where our project is presented in a more relaxed way. For example, you can find occasional streaming of our tests and other interesting stuff. The true enthusiasts can also find us on GitHub where all the code associated with the project is placed. If you have any questions or suggestions, feel free to contact us.