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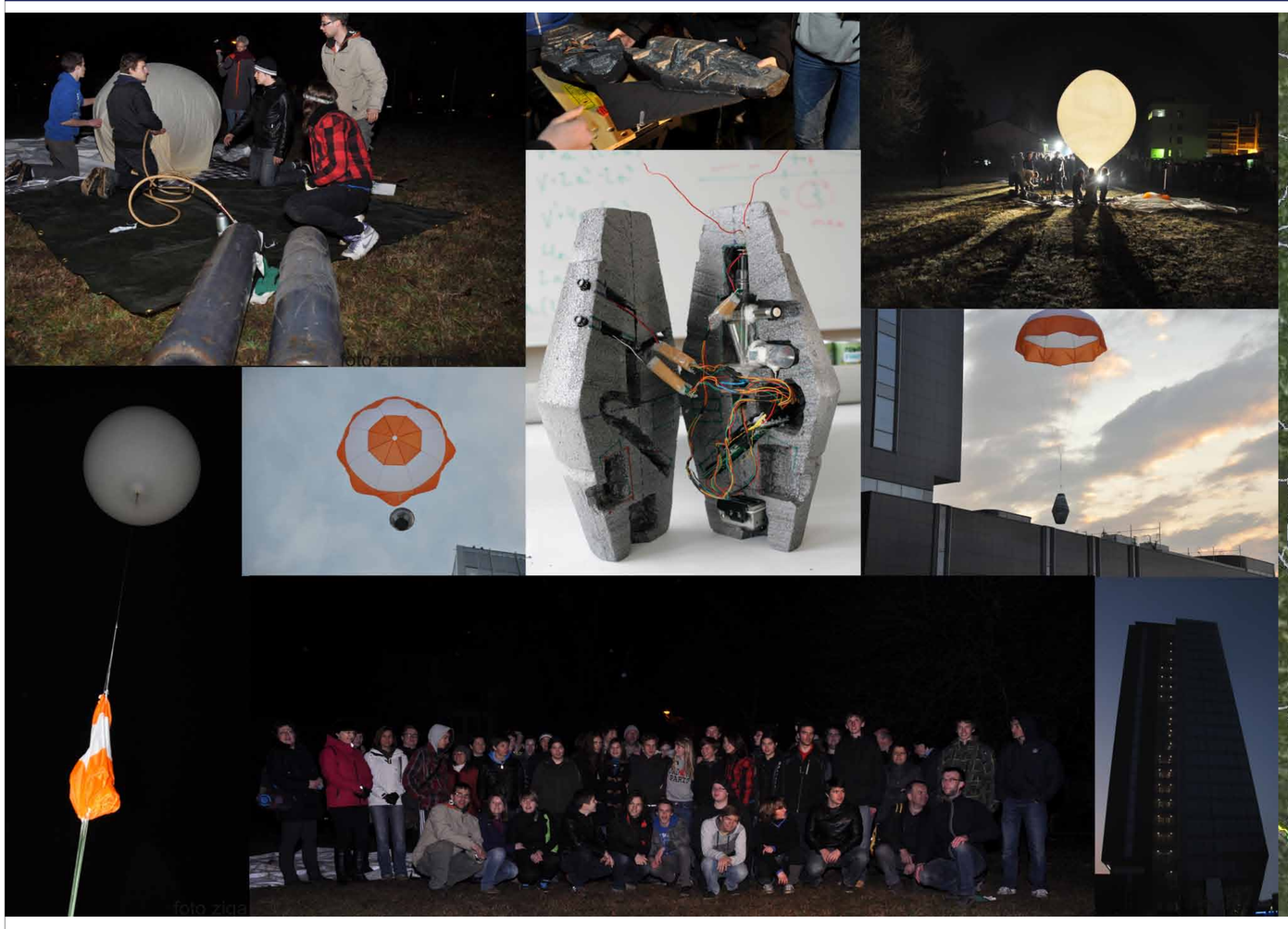
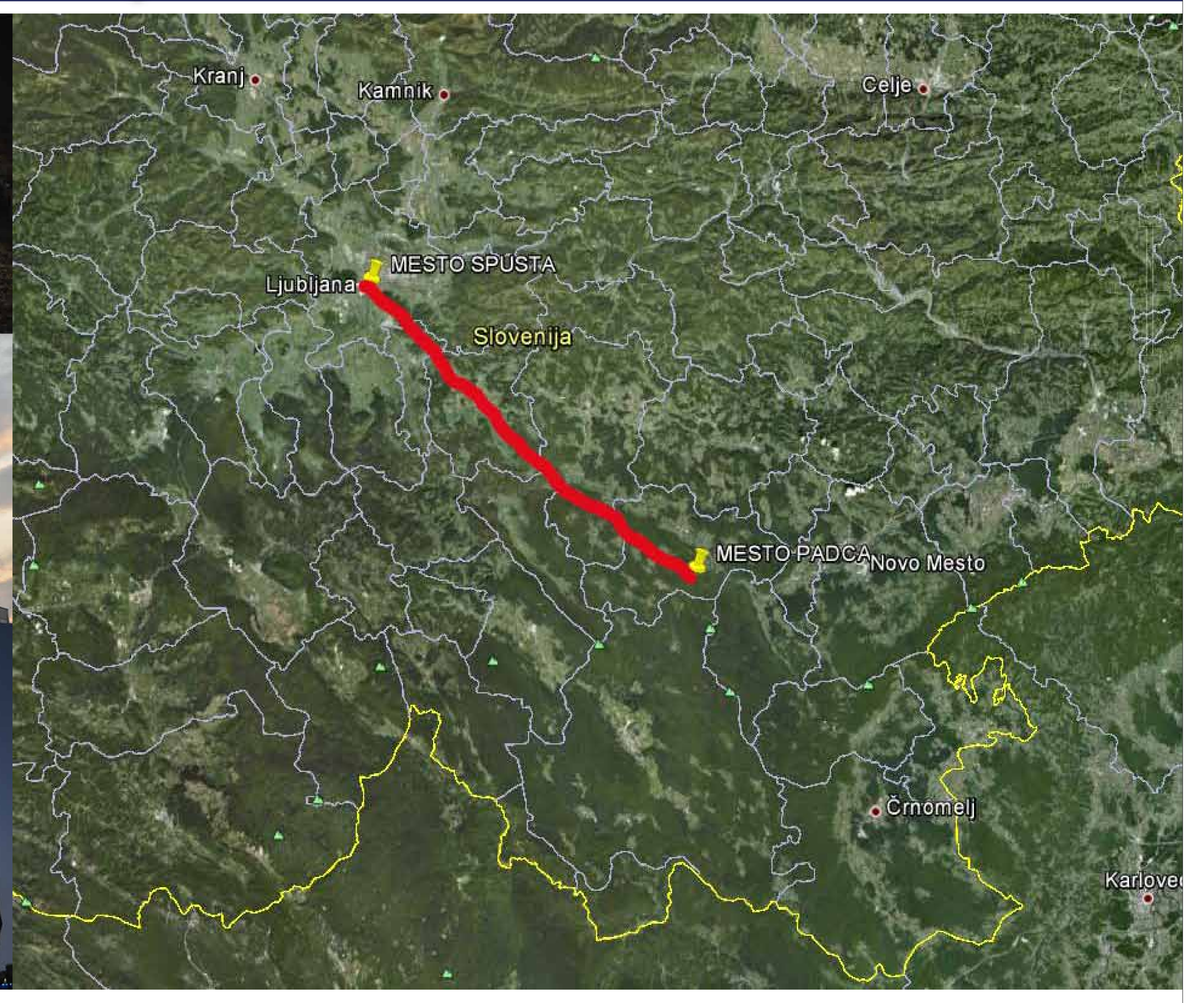
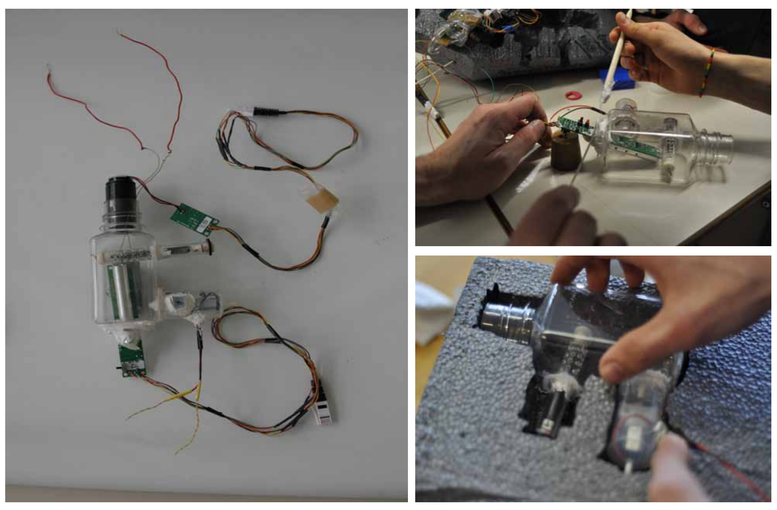
Vič Goes to Space
Launch of the Atmospheric Probe





The probe was launched on 3rd March at 5.15 am. It landed approximately 50 km from the launch site, after reaching an altitude of 32 km. Most of the data was successfully retrieved and analysed. The results were then used for the construction of the other probe.

- Construction of the heated pressure chamber, for measuring the CO_2 and O_2 concentration.

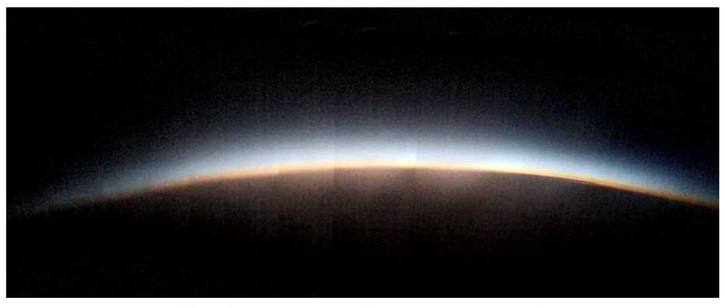


- Tracking system installation.
- Preparing the samples of *Saccharomyces cerevisiae* and *Cryptococcus liquefaciens.* During the preliminary test both cultures were cultivated in normal conditions.

- Construction and testing of parachute opening system.
- Completing the probe - the probe with all sensors included and the final shape of the probe.

- Preliminary overall system testing - dropping the probe from the top of the »Kristalna palača« (81 m).

- The launch of the probe (feature image of the poster).
- Data gathering and data interpretation.
- Possible improvements.



The dawn captured by camera on probe.

- Searching for the probe after the first launch. The probe was found after 21 days.

Results

- Balloon burst altitude: 32 km above sea level.
- Ascent time: 52 minutes.
- Average ascent speed: 10 m/s.
- The lowest temperature -36°C (probe's exterior), -32°C (probe's interior).

QR codes. **From left to right: V**ideo of the preliminary drop from the top of the »Kristalna palača«. Video recorded during the first launch.

- »Make a space probe« instructions.

Conclusions

- Temperature dependence on height (probe's exterior and interior).
- Air pressure falls exponentially as the height increases.
- Light intensity rises exponentially as the height increases.
- Suggestions for improvements.
- Video clips from the flight – available at **http:/vesolje.gimvic.org/en.**
- The project won the first prize at the international school project contest at »instructables.com«.