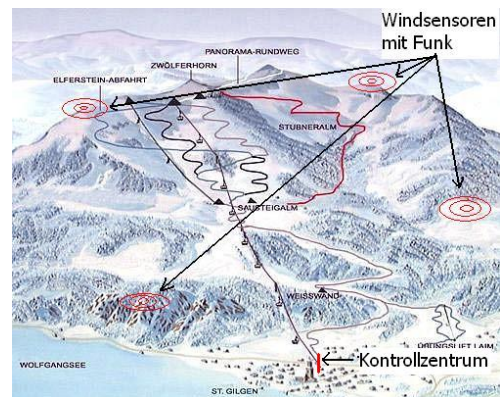


Master/Term thesis “A low power sensor network for wind measurements”

Motivation

Rapid onset of strong winds can be hazardous for many technical applications such as air transportation or cable cars and also leisure sports such as paragliding. Several (almost) airplane crashes have occurred due to wind blasts directly after the start and just before the landing of an airplane. Though it is possible to predict the likelihood of storms on a certain day, there is currently no means to predict the strength and time of a blast locally, e.g. at an airstrip of the Zurich Airport or at a cable car. This project targets to develop a low power wireless (wind) sensor network that reports winds above a certain speed several seconds before they hit a target.

Task We have performed a few measurements regarding the feasibility of the project and designed a circuit. As a next step we want to build a sensor node and, ideally, already implement a network with 2-3 nodes and a base station to perform some (outdoor) experiments.



Requirements

Any student is welcome to apply for the thesis! The student should be a hands-on person, who likes building things in a workshop and has already (some) experience in building electrical circuits. Interested? Please contact us for more details!

Contact

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