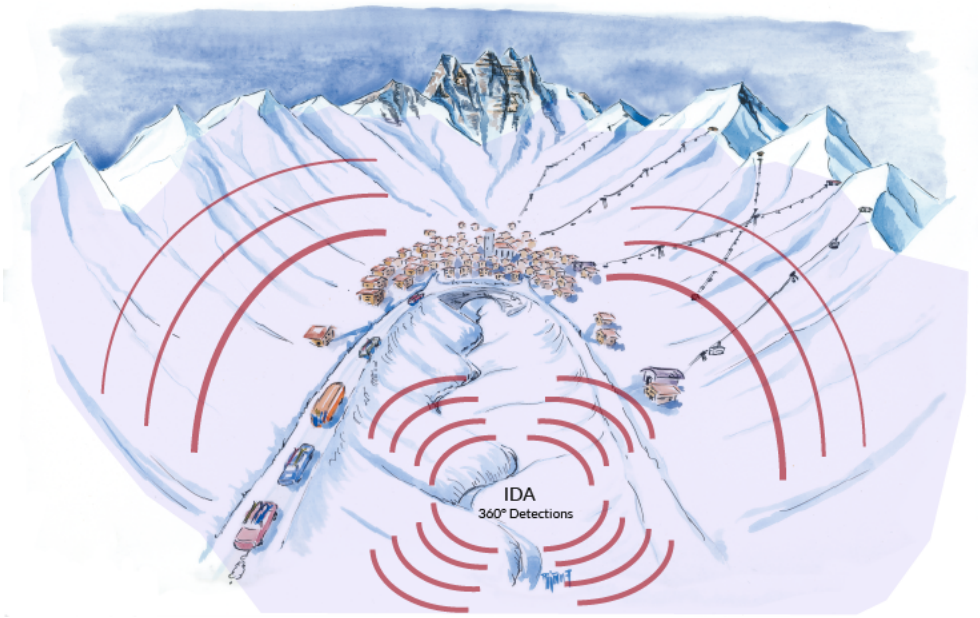
IDA® detects avalanches continuously and in any weather from any direction. This information is very valuable for to get an overview of the avalanche-situation especially if there is no sight



IDA® allows to monitor the avalanche activity of a larger area within a radius of 3 to 5 km (1.8 – 3.1 miles). It provides valuable information to avalanche forecasting teams about the natural avalanche activity and artificially triggered avalanches. Notifications are provided to operational personnel automatically by IDA®.

In the 2020/2021 winter season, more than 1800 avalanches were detected by IDA® at 23 locations worldwide.

Download Product sheet:

IDA® Infrasound Detection System

Wie IDA® works in Goms (CH)...

The entire infrastructure in Goms is secured by 4x IDA® installations in interaction with a GINA®, 8x Wyssen avalanche towers LS12-5 and a safety concept by Geoformer igp AG, which is fully integrated into the WAC.3® Cockpit and RiskEval.

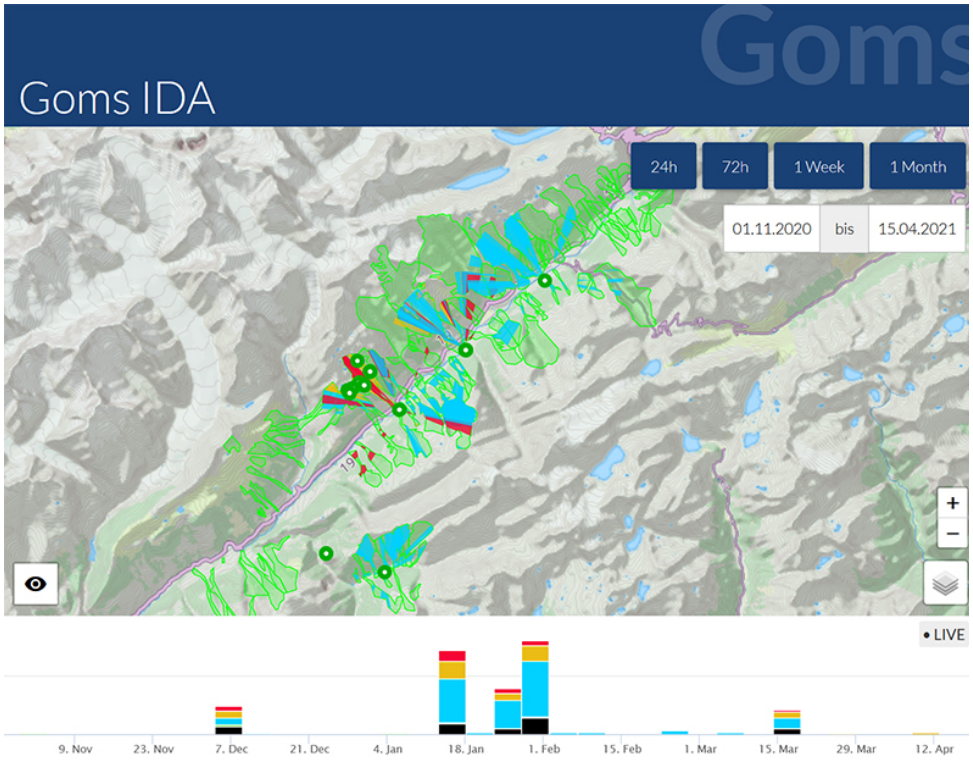
The avalanche detection network in Goms thus recorded in the winter season 2020/21:

- **136 IDA® detections of spontaneous avalanches**
- **23 IDA® detections of controlled avalanches**
- **7 GINA® detections of avalanches**
- **40 detonations with the avalanche towers**

Thanks to extensive avalanche detection and a fully integrated safety concept, avalanche restrictions were optimized.

More information about the project:

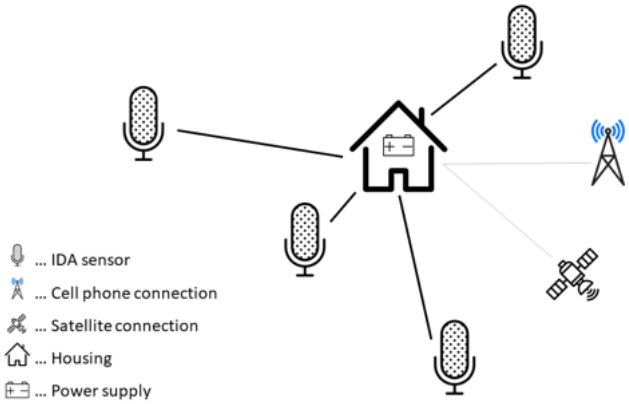
Project in Goms (CH)



Technology

An IDA® array consists of 4 to 5 infrasound sensors which are deployed in a star shape around a central unit. The system can be powered with autonomous or grid power supply and data is transmitted in real-time to a server for data processing and automatic notifications (SMS, e-mail, publication in databases). Infrasound waves are low frequency (<20 Hz) sound waves (pressure fluctuations) traveling through the air at the speed of sound (340 m/s). They occupy a relatively narrow frequency band (0.001 Hz – 20 Hz), too low to be perceived by the human ear. Very little attenuation travelling the atmosphere occurs compared to seismic waves propagating in the ground. For other applications, the infrasound technology is widely used for the detection of different natural (e.g. volcanic eruptions) and artificial phenomena (e.g. nuclear explosion).

All data is visualized in the **web-based platform WAC.3®** which also allows to display all recorded avalanches (e.g. an entire season)



Technical Data

Functional principle	Avalanches produce infrasound waves below 20 Hz (not audible for humans), which are detectable over large distances. Algorithms and filters allow to differentiate avalanches from other infrasound sources.
Setup	4 – 5 sensors are installed radially with a distance of approx. 100 m (328 ft). This array is installed outside of the avalanche path and connected to a central computer where the data is transmitted to a server for analysis.
Display	Fully integrated in our Wyssen Avalanche Control Center WAC.3®
Range	up to 3-5 km (1.8 – 3.1 miles) for avalanches > size 2.5
Opening angle	360°
Communication	Mobile phone network
Power supply	electricity grid or fuel cell