# The Hill Der and Its Past



The research paper presents the hill Der, which had a supporting role during World War I. Its relief was examined and found that is, despite its simplicity, something special. A great help to us was the LIDAR based digital terrrain model. LIDAR or airborne laser scanning technology has the potential to show many archaeological features previously hidden from aerial reconnaissance by canopy cover.



#### Problem overview

- We were motivated by its position, because the terrain is easy accessible. Yet not many people in the surrounding area heard what was happening there, and so they didn't even think that it had a role during World War I.
- The terrain has already been investigated but nowhere is specifically mentioned, because according to accessible data, did not have a specific function during the war.

### Methods

- First we analysed the lidar image, where we observed various structures on the hill Der, which could be related to the Soča front.
- On the spot, there were still some buildings that weren't visible in the lidar image. The interest grew.
- We drew the map on the web GIS application Geopedia. Later we have submitted all the information we have acquired and added pictures of the terrain.
- We have selected additional information and prepare them for presentation.



The hill Der, where were engineering headquarters of the fourth Army Corps, with a view of mountain Krn.



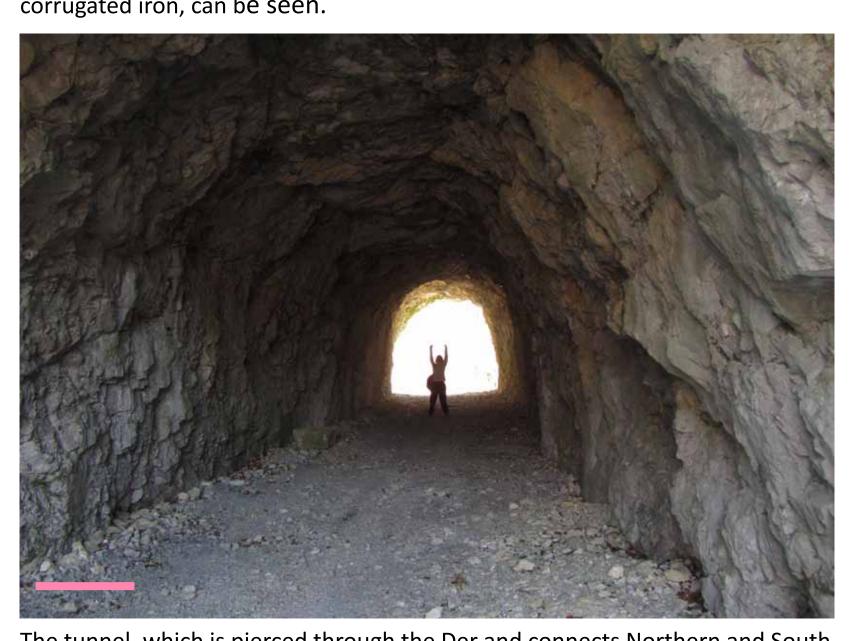
Part of the connecting trench, which runs across the width of the hill. Observatory is visible on the left side as well as stairs, which go to south side of Der.

CENTRE OF EXCELLENCE

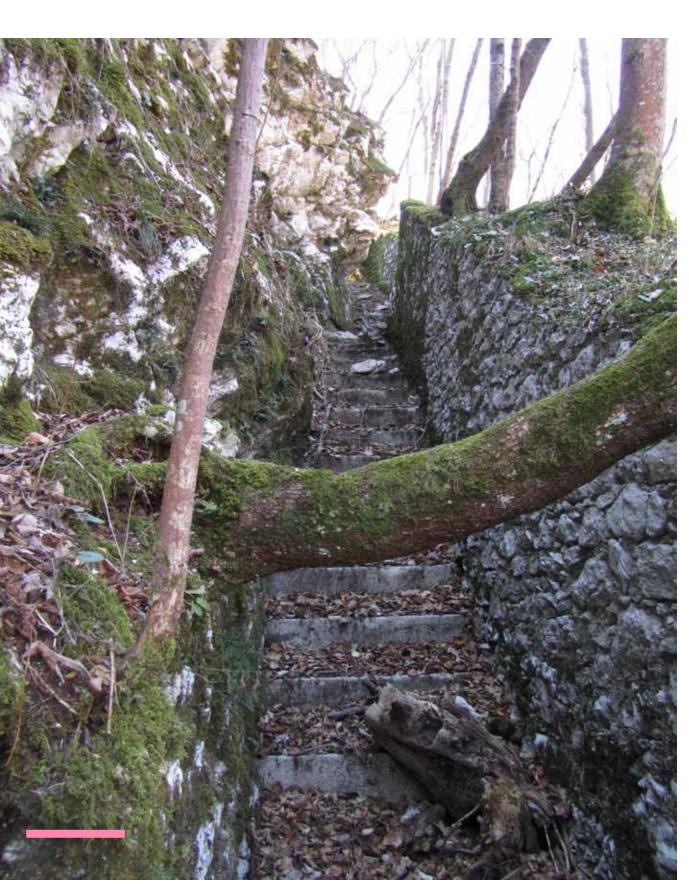
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Accuracy of the engineers at building high trenches, which were covered with corrugated iron, can be seen.



The tunnel, which is pierced through the Der and connects Northern and Southern part of the hill.



The trench which leads to the highest point of the hill, where is a good view of the entire valley below mountain.



concrete plateau was probably used for small arms. Below: A bunker on the south side of the hill with the view to Furlania. It was used as a observation point or as

#### Data

- Shaded lidar digital terrain model with 0.5 m resolution and cartographic material.
- References.
- Lots of information that we got from the Kobarid Museum and The walks of peace in the Soča region Foundation.
- Information from the locals.

## Conclusions

- With this research paper we have tried to find out what was happening on the hill Der during World War I and also helped that other locals learned more about the Der.
- On the Der, there was the main engineering headquarters of the Fourth Armada Corps, which was concerned with organization the battlefields on the Soča front, like where to build mule track, bridges, tunnels, the barbed wire and weapons storages.
- The unit was also provided as a back-line of defense, if the enemy would penetrate the first three lines of defense.
- We found that there are a lot of remains on the Der like connecting tunnels, huts, paths, tunnels, shooting situations and observatories. Doing so we have learned many new things about the history, how to use Geopedia how to use lidar digital terrain model.
- Unfortunately, we couldn't get all the data, which was an obstacle at our work.
- Terrain of the Der is very interesting. Among the research, we got an idea of an outdoor museum, which could be edited, since all objects are visible and well preserved.