DETERMINATION OF VISIBILITY BETWEEN CARD POINTS

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ABSTRACT: *The article discusses methods for determining visibility between two points of a topographic map. The different ways are depicted depending on what we have at our disposal.*

KEYWORDS: *visibility, altitude, exceedance, obstacle, sight beam*

Determining the visibility between two points can be done in several ways: comparing point heights by constructing a triangle, computing, and building a profile.

1. Determine visibility by comparing point heights.

- Explore the relief in the direction of the observed point and determine the unevenness that would interfere with visibility;
- Set the altitude of the starting point ($H_{start.}$), the obstacle ($H_{obst.}$) and the end point (H_{end});
- Compare the determined altitudes Fig. 1 if:
- $H_{obst.}$ is less than $H_{start.}$ and H_{end}, then we have visibility;
- $H_{obst.}$ is higher than $H_{start.}$ and H_{end}, then we have no visibility;
- $H_{obst.}$ is less than $H_{start.}$ and higher than H_{end} or vice versa, the visibility is questionable. In this case, the distance between the obstacle and the end point affects visibility. As the obstacle is closer to the endpoint, the more it will interfere with the visibility, and vice versa, the longer the visibility is better.