

DynaMAT

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Materials from the Austrian team

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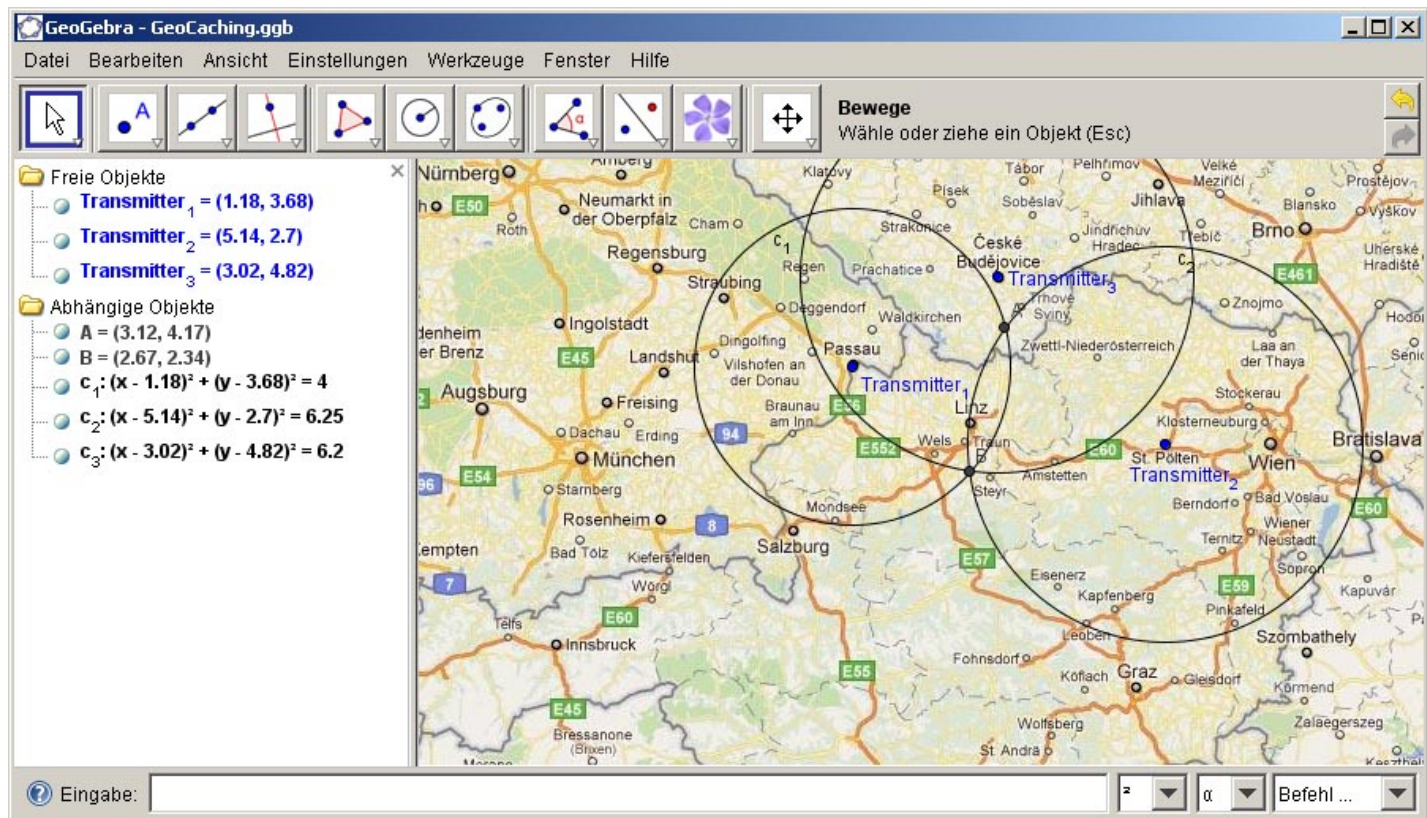


Example: GeoCaching (1)

- What is GeoCaching?
- Why use it in teaching mathematics?
- How does GPS work?
- Some concrete tasks with finding GeoCaches

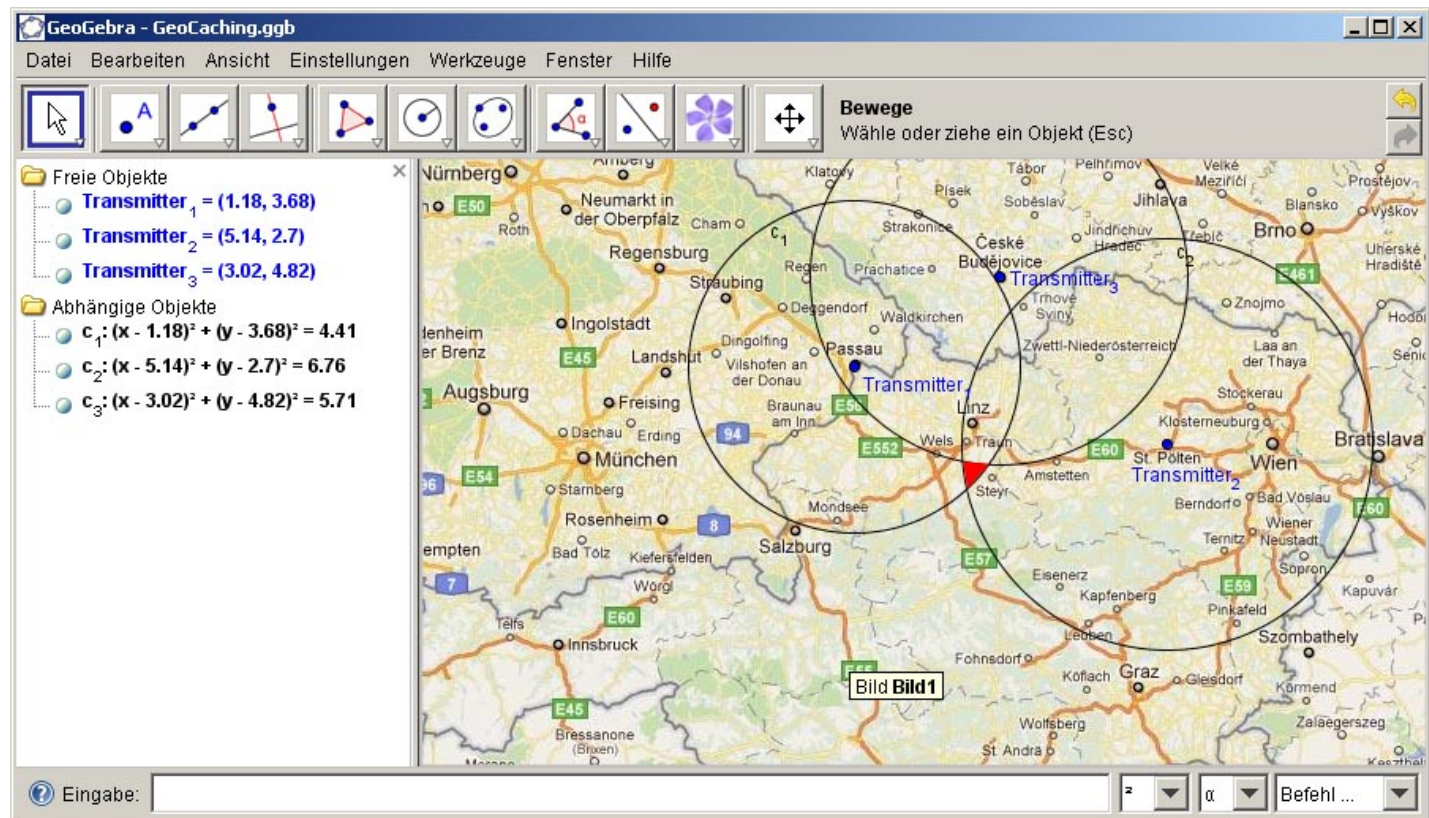
Example: GeoCaching (2)

- Possible explanation using a 2D-model



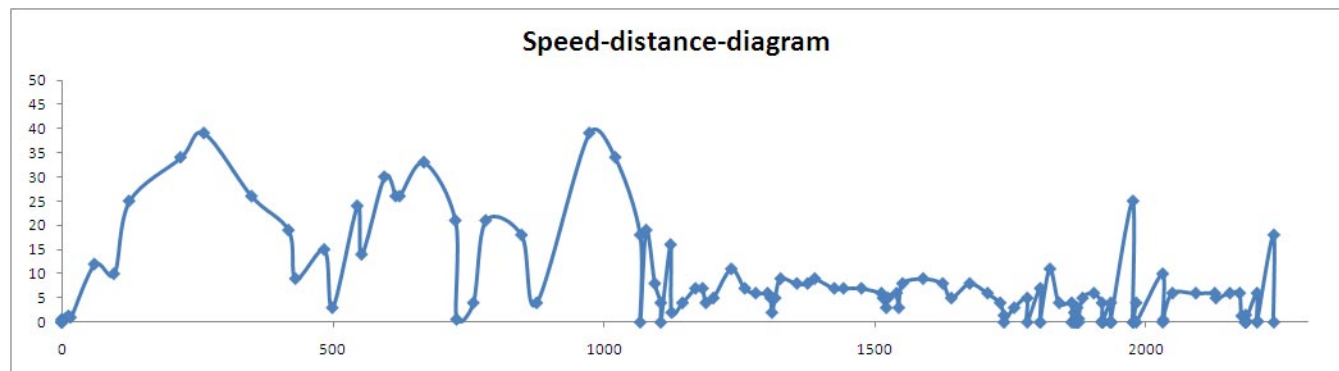
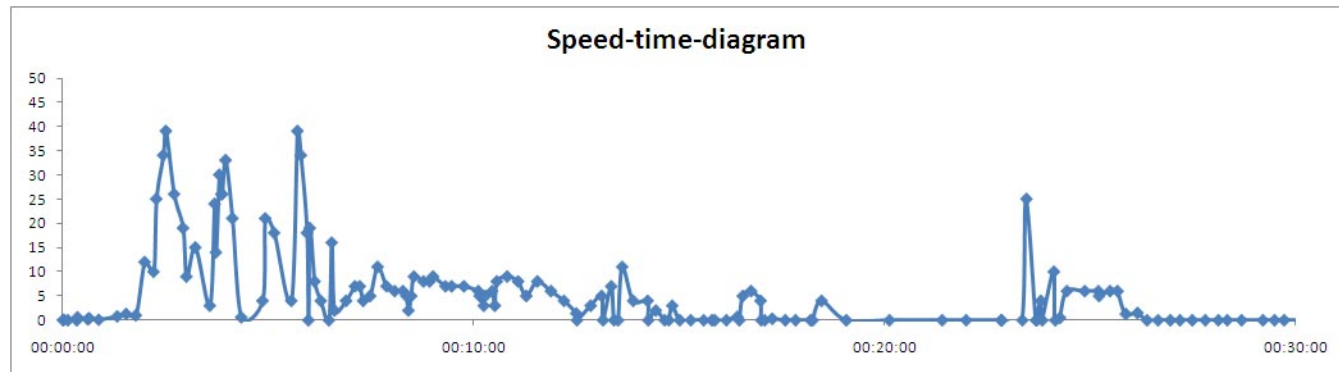
Example: GeoCaching (3)

- Explaining the limits of the model



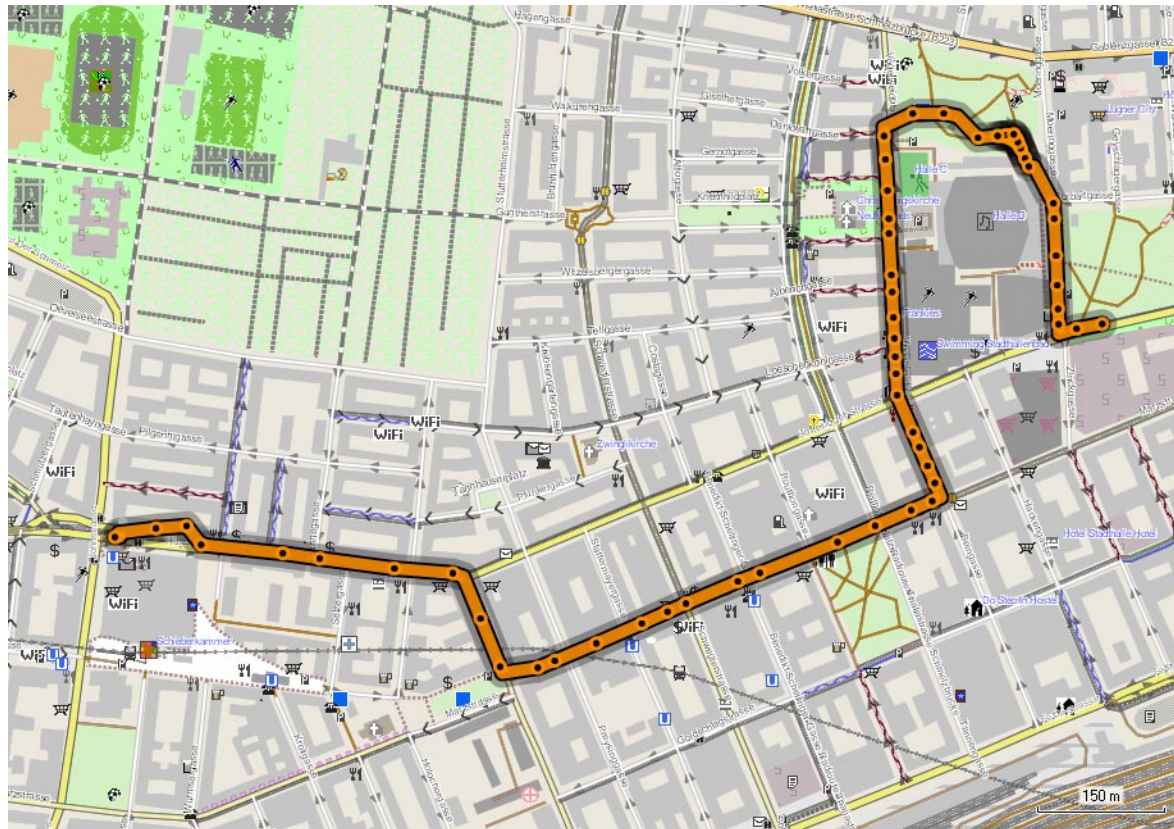
Example: GeoCaching (4)

- Interpreting data of a GeoCaching trip



Example: GeoCaching (5)

- Now where is the Cache?



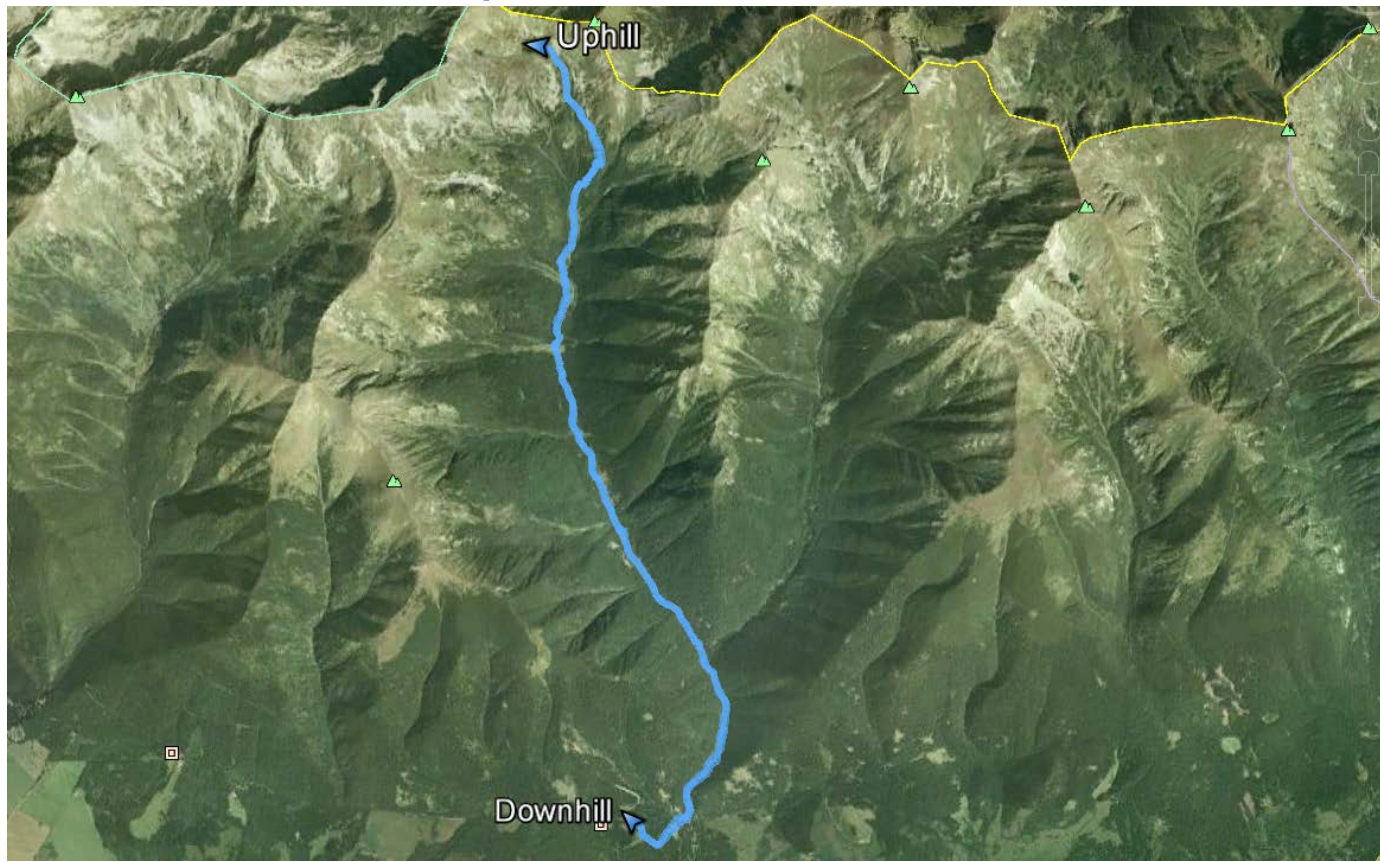


Example: GeoCaching (6)

- Can ask more questions:
 - How much time did the trip take?
 - What distance was covered?
 - What was the average speed?

Example: Hiking in Tatra (1)

- That was our trip:





Example: Hiking in Tatra (2)

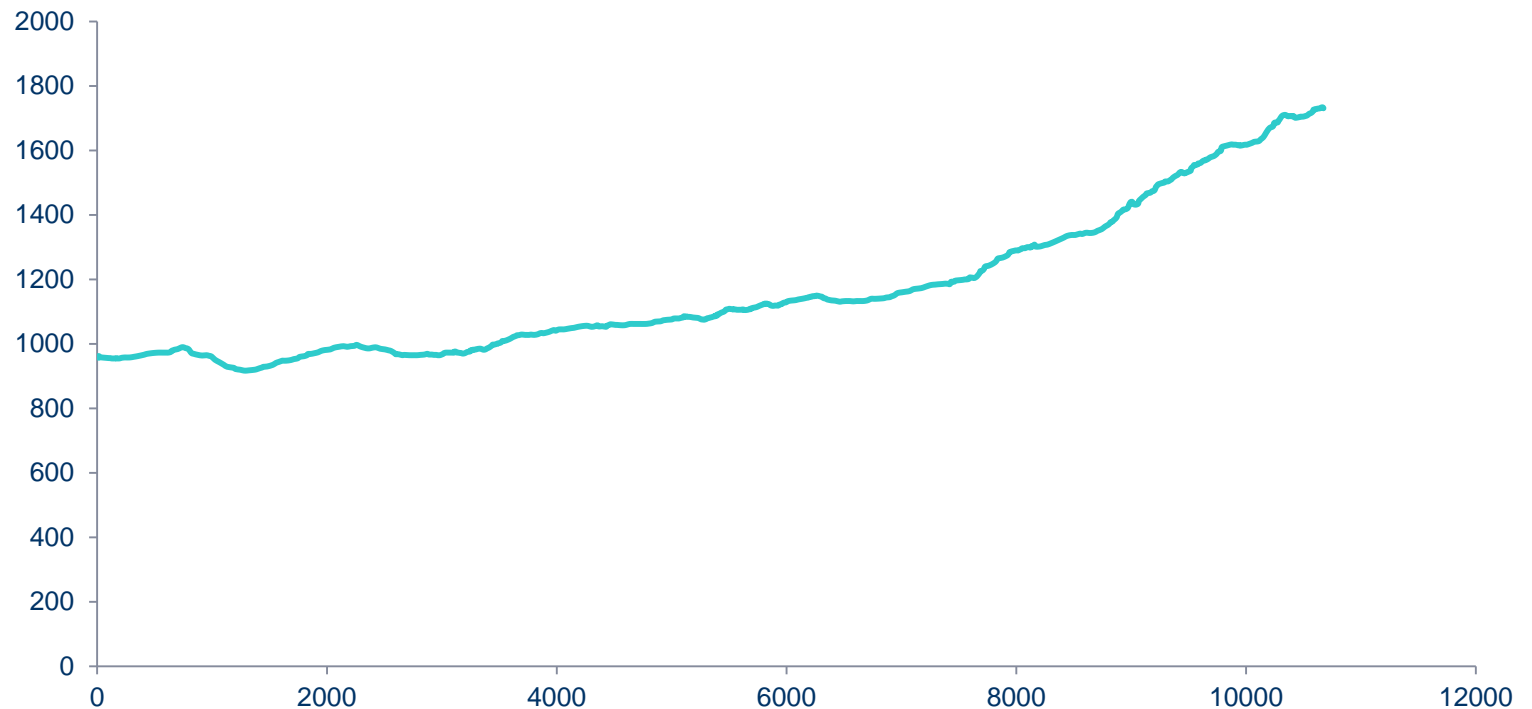
- What distance did we cover?
 - 21.1 km
- How long did we need?
 - Uphill: 4:05 hours
 - Downhill: 3:28 hours
- What was our average speed?
 - Uphill: 2.61 km/h
 - Downhill: 3.03 km/h



Example: Hiking in Tatras (3)

- Altitude profile

Altitude profile (altitude-distance diagram)





Example: Hiking in Tatras (4)

- Distance-time diagram

distance-time diagram

