

Usability Testing of Vario-scale Maps

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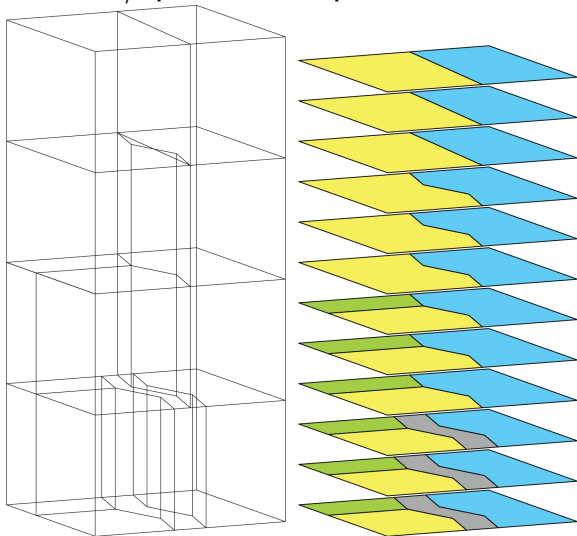


Enabling new technology

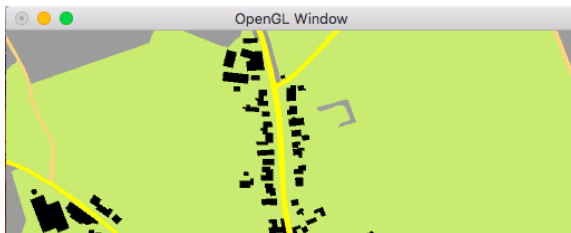
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Assumption at start of project: Vario-scale maps
will provide faster and more effective interaction:
Better understanding / mental model

Viewer for SSC – Now makes it possible to get real
/ practical experience



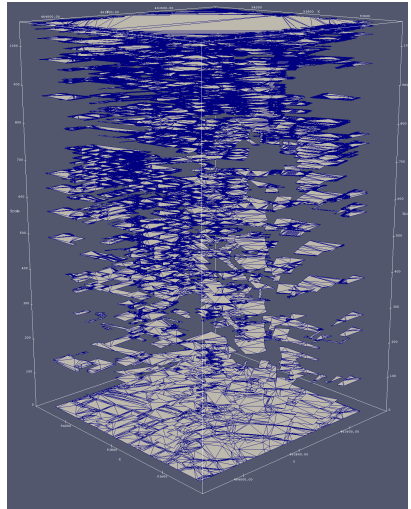
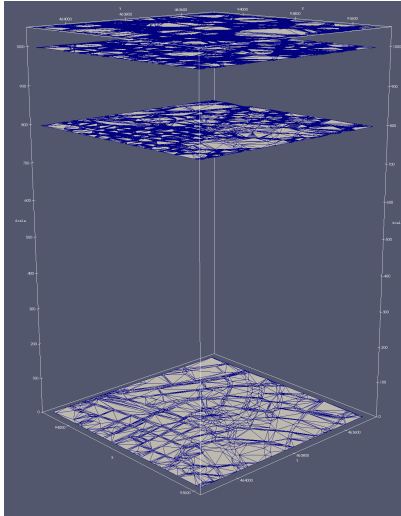
- Orthogonal projection
- Fast slicing (based on GPU) — Smooth content zoom
- No polished GUI (Graphical User Interface)



TASK DEMO



Now, we test discrete sets of data versus continuous changing data



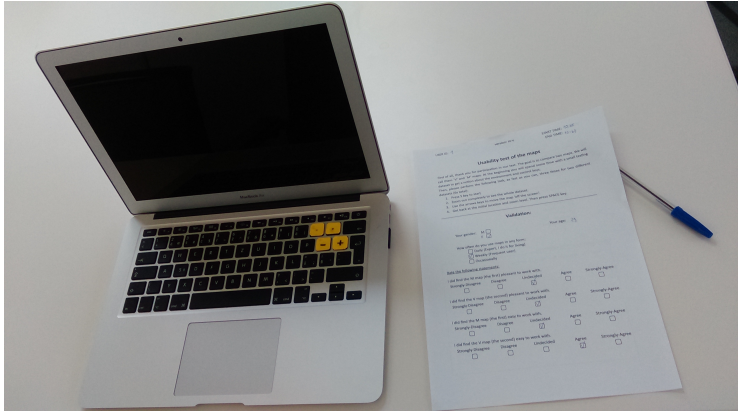
Testing dataset

- Area of 9x9 km
- 13k faces as input



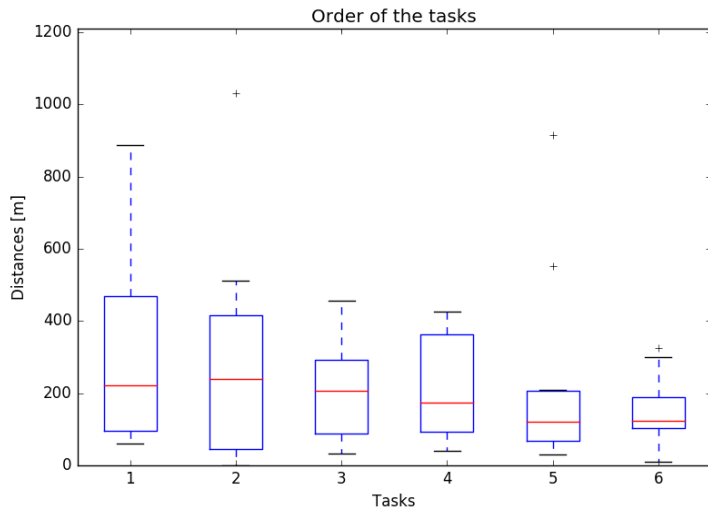
Testing

- 12 tested, 10 valid recordings. (2 not recorded)
- We measured: times, locations, scale values
- Questionnaire
- Screen captured
- 8 control keys (4 arrows, and 4 yellow on picture)

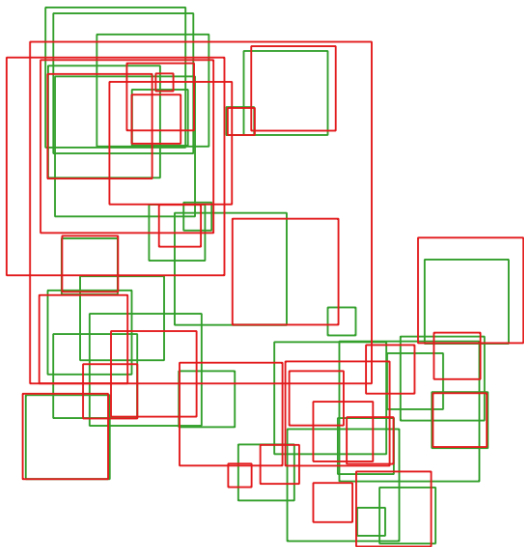


- Gender, Age
- How often they use maps in any form.
- Their preference in the test (first of second map).
- What was the most missing aspect (not implemented yet).

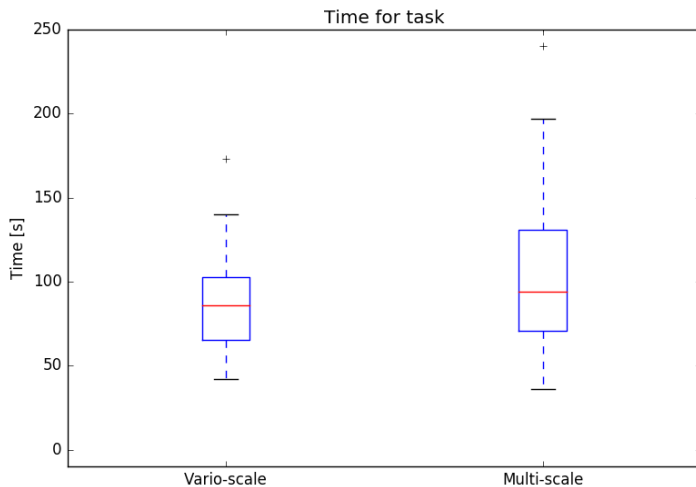
Results



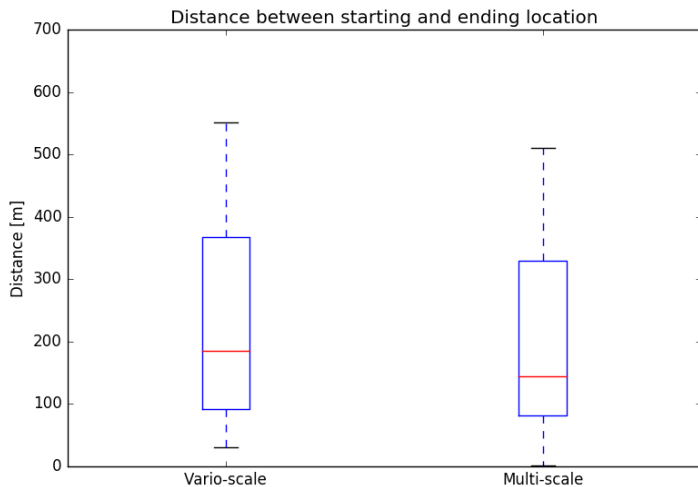
Results



Results



Results



Conclusion

- We need more users! More data.
- Vario-scale is faster.
- Easier to find original scale in multi-scale.
- Users didn't feel any differences between datasets
- Test set-up with more natural GUI: mouse interaction.

- Analyse different content generation strategies
- Use of different tools (colour blending, local magnifier, perspective view)
- Different types of mouse/keyboard interaction
- Animation / morphing techniques

Thanks for your attention

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