

## Tracking Effective Label Placement

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Recent technologies facilitate the interactive and dynamic manipulation of screen maps, causing changes in the current view. Labels on these maps are important anchor points in the user's orientation process. Good label placement is therefore essential to improve this orientation process significantly. The user from his side also needs to be able to process the newly displayed view after each interaction – with the occurred changes – in an effective way, which is linked to his cognitive map. The objective of this study is therefore to obtain detailed insights in the user's cognitive processes while working on dynamic and interactive maps. Special attention is paid to the influence on the effectiveness of the map towards the user when different label placement options are used. During the experiment, the eye movements of 28 participants are recorded while working on a set of dynamic demo maps. Quantitative analysis of the eye movement metrics show that the efficiency of the label placement can be improved significantly without disturbing the user's cognitive map.