

GeoGCD: Geographic Gaze Contingent Display

Conference Poster

Author(s):

Bektaş, Kenan; Çöltekin, Arzu

Publication date:

2018-01-14

Permanent link:

<https://doi.org/10.3929/ethz-b-000222490>

Rights / license:

[Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International](#)

GeoGCD: Geographic Gaze Contingent Display

Kenan Bektaş, Arzu Çöltekin

Department of Geography, University of Zurich, Switzerland Zurich – kenan.bektas@gmail.com, arzu.coltekin@geo.uzh.ch

Keywords. Gaze Contingent Display, OpenGL, Image Interpretation

1. GeoGCD Demo

1.1. Introduction and Procedure

The GeoGCD serves as a testbed to assess the potential of perceptually plausible, HVS-inspired and gaze contingent geovisualizations. The GeoGCD implements several visual perceptual models (VPMs), and enables computational validation and user evaluation (Bektaş & Çöltekin, 2011; 2012; and Bektaş et al., 2015). The demo starts with a briefing about eye tracking and task description. Each participant will perform visual search tasks on aerial images with both a uniform resolution and a gaze contingent display. After each session, participants will be informed about the implications of a gaze contingent visualization compared to a uniform one.

1.2. Requirements

The authors intend to bring a workstation and a Tobii TX300 eyetracker. We expect from the conference organizers an office desk (min. 60 x 60 x 80 cm); and two chairs (one should be height adjustable and without casters).

References

Bektaş K, Çöltekin A (2011) An Approach to Modeling Spatial Perception for Geovisualization. *Procedia – Social and Behavioral Sciences*, 21:53-62

Bektaş K, Çöltekin A (2012) Area of Interest Based Interaction and Geovisualization with WebGL. *The Graphical Web Conference*, 1-14.

Bektaş K, Çöltekin A, Krüger J, Duchowski A T (2015) A Testbed Combining Visual Perception Models for Geographic Gaze Contingent Displays. <https://Diglib.Eg.Org/Handle/10.2312/Eurovisshort.20151127.067-071>, 67-71.