

Title: Ideal Bayesian Observer with reduced detectability map

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Abstract: A computational modeling of the human vision is a challenging task. In recent years, a biologically inspired model Ideal Bayesian Observer was created for the visual search task (Najemnik & Geisler, 2005). The model predicts eye movements when searching for Gabor patch in $1/f$ noise. In their work, they observed similarity between distributions of fixations and saccades predicted by Ideal Bayesian Observer and distributions of fixations and saccades from a human observer. In this work, we have implemented Ideal Bayesian Observer with degenerated visual field and compared the model with behavior of a human.

Keywords: Ideal Bayesian Observer, eye movements, modeling, central scotoma