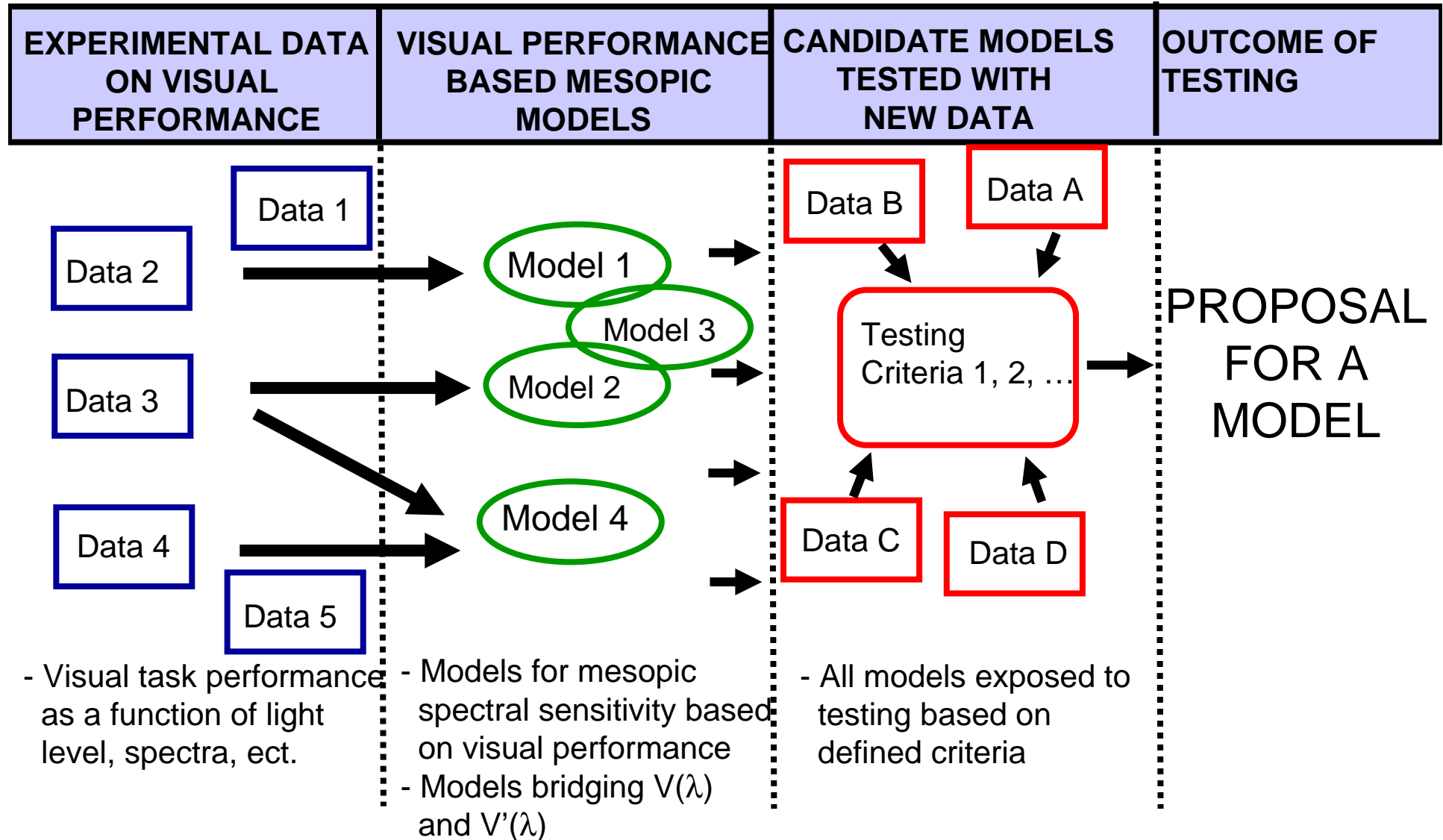


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Towards Proposal of a Model



Criteria for Testing the Models

Criteria agreed in the Eindhoven meeting

Spread in Mesopic Contrast for constant VP

Assuming, that for specific background conditions and target eccentricity, the mesopic contrast required to reach the detection threshold or fixed reaction time is the same for all target colors, then the spectral sensitivity function (ie mesopic model) describes the visual performance correctly. An optimal model is such that the variation in the mesopic contrasts is minimal

The spread of mesopic contrasts gives a measure of how closely a spectral sensitivity function (ie mesopic model) describes the measured data. The smaller the spread, the better the model predicts the data. In this work, standard deviation of the mesopic contrasts is used as a measure of spread.

Trend analysis

Serves as a sensitivity analysis for comparing various systems of photometry at allowing predictions of visual responses as a function of light level.

The criterion in making the comparisons is that the data should be transitive with the model predictions of background (mesopic) luminance, i.e. the response time/threshold contrast data should decrease monotonically with background (mesopic) luminance estimates from each of the models.