

Two spot increment and decrement summation as a function of spot separation

Addendum 2

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This addendum was posted after completion of the originally planned dataset, and specifies a follow up measurement.

For Subject 11002, the data for the second session often indicated very high thresholds, and were inconsistent with the data for the first session for that subject and with the data for the other subjects. An example psychometric function illustrating a large difference across sessions is shown below (225 sep 7 data). This difference was not seen for all conditions (0 sep 0, also below; see data not fits), but in enough to make the data problematic, particularly since we are constraining this slope of the psychometric function within session (see preregistration document posted for this experiment).

We do not know the cause of the high thresholds, although the subject reported seeing very few stimuli during the course of the experiment. One conjecture is that the focus was either incorrectly set at the start of or drifted during the experiment, for unknown reasons.

We will recollect the second session of data for Subject 11002, and discard the original second session data. We have also revised our protocol to include a set of subjective focus measurements, in which the subject will judge the sharpness of a grating stimulus across a range of focus choices. We will compare these with the originally implemented objective method of obtaining best focus, and use the comparison to guide future experiments. In the event that the subjective and objective methods of determining the best focus disagree, we will show the subject the two focus levels again and allow the subject to determine subjectively which level will be used throughout the experimental session.



