Results

### Goals

- Investigate the spatial properties that underlie the central performance drop.
- Characterize the attentional effects in texture segmentation tasks.

### Hypotheses

- Does covert attention shift overall sensitivity towards higher spatial frequencies?
- The size of spatial filters at the fovea is too small for the scale of the texture.
- Viewing distance, 28 cm
- Within-subjects design: high vs. low vs. control
- 33 locations (0 to 23° ecc.)
- Fixation point (500 ms)
- Peripheral or Neutral Cue (60 ms)
- Mask (500 ms)
- Was the target tilted to the left or to the right?

### Methods

- 4 min of adaptation followed by ~3 min of data collection
- The overall sensitivity of the attended region shifts towards higher spatial frequencies.
- Attention helps when resolution is too low, but hinders when it is already too high.
- The size of spatial filters at the fovea is too small for the scale of the texture.

### Predictions

- Adaptation to low spatial frequency eliminates the central performance drop.
- Attentional impairment at central locations
- Removing high frequency information from the display eliminates the central performance drop.

### Results

- Eliminates the central performance drop
- No central impairment
- Allows a finer scale analysis of stimuli

### Conclusion

- The overall sensitivity of the attended region shifts towards higher spatial frequencies.
- Attentional modulation via a spatial tuning mechanism produces attentional modulation via a spatial tuning mechanism.