Files represent data from a visual search paradigm, participants searched for a target object (among distractor items) on either a camouflage background or blank background. On 50% of the trials, the target object was present. Set size (the number of objects in the display) was large or small.

Generally, target-absent trials take longer, and reaction time increases linearly with set size. Camouflage also greatly increases reaction time. Eye movements were recorded on each trial.

**Important Messages:**

Message lines begin with the three letters “MSG”. Relevant messages are described below.

**MSG 152463464 TRIALID 1**

This marks the start of a new trial.

**MSG 152463465 SETSIZE 19**

There are 19 objects in the display.

**MSG 152435167 PRESENTABSENT 1**

Is the search target there or not? 1 = present.

**MSG 152435167 BACKGROUND\_IMAGE none**

None = blank background. If there is a background image, then it's a camo condition.

**MSG 152435169 TARGET ITEM 480 0 images\25.bmp  
MSG 152435170 DISTRACTOR ITEM 0 320 images\38.bmp  
MSG 152435171 DISTRACTOR ITEM 560 0 images\48.bmp  
MSG 152435172 DISTRACTOR ITEM 80 160 images\20.bmp  
MSG 152435173 DISTRACTOR ITEM 720 320 images\17.bmp  
MSG 152435174 DISTRACTOR ITEM 0 480 images\35.bmp  
MSG 152435175 DISTRACTOR ITEM 160 240 images\9.bmp  
MSG 152435176 DISTRACTOR ITEM 160 80 images\10.bmp**

Target and Distractor items (if target is present). Numbers represent X and Y coordinates. Image specifies which object is present.

**MSG 152461676 2 DISPLAY ON**

The search display is now ON. The first number represents the millisecond timestamp.

**MSG 152463341 ENDBUTTON 7**

Which button was pressed (6 for target absent, 7 for target present response). Millisecond stamp can be used to calculate response time.

**Important Eye Measures:**

In most cases, a line in the file represents an eye sample. For example:

**152580778 325.0 367.7 936.0 .**

The first number is a time stamp. The second 2 numbers are X and Y coordinates of the eyes in screen pixels. These can be compared against the X and Y coordinates of each object. Don’t worry about the fourth number (pupil size, if I remember correctly).

*Saccades* are quick eye movements that bring the eyes from one location to another. In between these movements, there are stable periods in which the eyes are directed at a location for a period of time (usually between 200 and 500 ms) called *fixations*.

The eyetracker will also generate automatic messages whenever it thinks an eye movement has occurred.

**SSACC L 152599122**

SSACC = Start Saccade, L = Left eye tracked, then timestamp

**ESACC L 152599122 152599160 40 363.0 377.6 377.0 267.4 4.90 235**

ESACC = End Saccade, L = Left eye tracked, time stamp of the start of the saccade, time stamp of the end of the saccade, milliseconds in flight, X and Y of where the eyes started, then X and Y of where the eyes ended. Don’t worry about the rest.

**SFIX L 152562794**

A fixation has started, with a timestamp for the start of the fixation.

**EFIX L 152562794 152562824 32 393.5 293.7 936**

A fixation has ended. Timestamps for the start and end of the fixation, how long the fixation was (note that this one is very short!), and then the X and Y position of the fixation. You can check whether this matched any of the objects on the screen during the trial. Last number is pupil size.

You’ll also notice blinks which are marked in the data. We typically aren’t that interested in blinks.

**SBLINK L 152568494**

**EBLINK L 152568494 152568496 4**