

# ASL Results



The ASL Eye-Trac®6 series includes our ASL Results software programs for analyzing and displaying the collected data. This software allows you to do the following:

### Reduce data to a list of fixations

- A fixation is usually a period of at least 100 msec during which point of regard does not change by more than 1-degree visual angle
- Different researchers may have different opinions about the detail of this definition. (for example, they may want to define minimum fixation duration as somewhat less than 100 msec), and for this reason all parameters in the ASL fixation algorithm are adjustable by the user
- Each fixation in the list has a start time, duration, point of gaze coordinates and average pupil diameter
- Interfix duration is recorded and includes the time and distance

between the beginning of a new fixation and the end of the previous fixation.

### Specify Areas Of Interest (AOI)

An area of interest is a region of the scene that was viewed by the participant. These regions usually define some object or image component that is meaningful in terms of the research being done.



### Match fixations with AOI's

### Compute statistics relating fixations to AOI's

- Average amount of time spent viewing each AOI
- Number and duration of fixations in each AOI
- Probabilities of looking from one AOI to another

# Offline Data Analysis

- Average over multiple participants or trials.

### Superimpose plot of fixation "scanpath" over image viewed by participant

- Display all fixations, any subset of fixations, or step wise sets of fixations (E.g first 5, then next 5 etc.)
- Chose different symbols and colors for fixation indicators and different colors and line types for connecting lines
- Display fixation point symbols with a size proportional to fixation duration
- Superimpose multiple, color coded sets of fixations from different subjects or different trials
- Show areas of interest
- Create bitmap files for display in reports or slides

Fixation ID	Segment	Video	Duration	Pupil Size	CR	Recog	Hit	Recurrence	Mark	Vol	YDAT	Pupil	Dist
1	Reading_C	1	0	0.00000	TRUE	TRUE	TRUE	0	0	0	0	0	0
2	Reading_C	1	2	0.016603	TRUE	TRUE	TRUE	0	0	0	0	0	33
3	Reading_C	1	3	0.033207	TRUE	TRUE	TRUE	0	0	0	0	0	33
4	Reading_C	1	4	0.050005	TRUE	TRUE	TRUE	0	0	0	0	0	33
5	Reading_C	1	5	0.066739	TRUE	TRUE	TRUE	0	0	0	0	0	33
6	Reading_C	1	6	0.083417	TRUE	TRUE	TRUE	0	0	0	0	0	33
7	Reading_C	1	7	0.100111	TRUE	TRUE	TRUE	0	0	0	0	0	33
8	Reading_C	1	8	0.116792	TRUE	TRUE	TRUE	0	0	0	0	0	34
9	Reading_C	1	9	0.133467	TRUE	TRUE	TRUE	0	0	0	0	0	34
10	Reading_C	1	10	0.150154	TRUE	TRUE	TRUE	0	0	0	0	0	34
11	Reading_C	1	11	0.166834	TRUE	TRUE	TRUE	0	0	0	0	0	34
12	Reading_C	1	12	0.183517	TRUE	TRUE	TRUE	0	0	0	0	0	34
13	Reading_C	1	13	0.200202	TRUE	TRUE	TRUE	0	0	0	0	0	34
14	Reading_C	1	14	0.216884	TRUE	TRUE	TRUE	0	0	0	0	0	34
15	Reading_C	1	15	0.233567	TRUE	TRUE	TRUE	0	0	0	0	0	34
16	Reading_C	1	16	0.250250	TRUE	TRUE	TRUE	0	0	0	0	0	34
17	Reading_C	1	17	0.266934	TRUE	TRUE	TRUE	0	0	0	0	0	34
18	Reading_C	1	18	0.283617	TRUE	TRUE	TRUE	0	0	0	0	0	34
19	Reading_C	1	19	0.300303	TRUE	TRUE	TRUE	0	0	0	0	0	34
20	Reading_C	1	20	0.316984	TRUE	TRUE	TRUE	0	0	0	0	0	34
21	Reading_C	1	21	0.333667	TRUE	TRUE	TRUE	0	0	0	0	0	34
22	Reading_C	1	22	0.350350	TRUE	TRUE	TRUE	0	0	0	0	0	34
23	Reading_C	1	23	0.367034	TRUE	TRUE	TRUE	0	0	0	0	0	34
24	Reading_C	1	24	0.383717	TRUE	TRUE	TRUE	0	0	0	0	0	34
25	Reading_C	1	25	0.400404	TRUE	TRUE	TRUE	0	0	0	0	0	34
26	Reading_C	1	26	0.417084	TRUE	TRUE	TRUE	0	0	0	0	0	34
27	Reading_C	1	27	0.433767	TRUE	TRUE	TRUE	0	0	0	0	0	34
28	Reading_C	1	28	0.450450	TRUE	TRUE	TRUE	0	0	0	0	0	34
29	Reading_C	1	29	0.467134	TRUE	TRUE	TRUE	0	0	0	0	0	34
30	Reading_C	1	30	0.483817	TRUE	TRUE	TRUE	0	0	0	0	0	34
31	Reading_C	1	31	0.500501	TRUE	TRUE	TRUE	0	0	0	0	0	34
32	Reading_C	1	32	0.517184	TRUE	TRUE	TRUE	0	0	0	0	0	34
33	Reading_C	1	33	0.533867	TRUE	TRUE	TRUE	0	0	0	0	0	34