Fix\_Align Parameters

1. xy\_bounds

• A 1 × 4 vector (x-min, x-max, y-min, and y-max) representing the boundary for including fixations

• Fixations outside of this rectangle are removed *a priori* - before any tidying

• Can be set as NULL if all points included

• Default is NULL

2. keep\_y\_var

• TRUE/FALSE

• If TRUE, keep variability in y around the line

• Default is FALSE

3. use\_run\_rule

• TRUE/FALSE

• If TRUE, ambiguous fixations are potentially reclassified by their surrounding fixations. Otherwise, they remain ambiguous.

• Default is TRUE

4. den\_sd\_cutoff

• Defines the number of standard deviations from a regression line that determines an outlier.

• If set to Inf, no fixation points are removed.

• Default is Inf

5. den\_ratio\_cutoff

• Defines the ratio (in density) that determines ambiguous fixations.

• If set to 0, no fixation points are removed.

• Default is 1

4. k\_bounds, o\_bounds, s\_bounds

• Each is a 1x2 vector

• k\_bounds: minimum and maximum values for regression line slope

• o\_bounds: minimum and maximum values for regression line vertical offset

• s\_bounds: minimum and maximum values for regression line st. dev.

• If set to NULL, k\_bounds and o\_bounds have values of 0.

• Default for k\_bounds is (-.1, .1)

• Default for o\_bounds is (-50, 50)

• Default for s\_bounds is (1, 20)

Robodoc Parameters

1. auto\_exclude, exclude\_threshold, abs\_exclude\_threshold

• auto\_exclude: set to 1 to drop participants who lost too many trials due to blinks, 0 otherwise

• exclude\_threshold: the maximum number of rejected trials in any one condition due to exclusion by a blink. CHECK

• abs\_exclude\_threshold: the max number of rejected trials overall for blinks. CHECK

• 2. blink\_num\_crit

• For excluding trials if they exceed a certain number of blinks

• Default: exclude if trial exceeds 1000 blinks

• 3. blink\_dur\_crit

• For excluding trials based on blinks/track losses above a certain duration

• Default: exclude if trial contains blinks/track loss exceeding 10,000

• 4. blink\_reg\_exclude

• “y” or “n”

• For excluding trials if there is a blink/track loss on the critical region

• If yes, provide a .cnt file and identify critical region.

• Must define whether trial should be excluded based on first-pass or go-past for this region: 0 = first pass; 1 = go-past

• 5. saccade\_dur\_crit

• For excluding trials with long saccade coming into, within, or going out of the critical region.

• Provide the minimum duration of the saccade.

• Default: exclude if saccade duration is greater than 1000

• 6. short\_crit

• For combining short fixations that are within 1 character of another fixation

• Provide the criterion for a short fixation in milliseconds

• Default is 1, which results in no combination.