Data for Experiment 1

- **Experiment 1_complete data.txt**
  - All information collected throughout the experiment (Experimental Software: E-Prime)
- **Experiment 1_reduced.txt**
  - Reduced data set, irrelevant columns were filtered out
  - Column coding see below
- **Experiment 1_aggregated for analysis_no filter.sav**
  - Aggregated data for data analysis (useable for SPSS syntax) - Column coding see below
- **Experiment 1_aggregated for analysis_filter.sav**
  - Aggregated data after applying cut-off criteria (for more details, see manuscript) for data analysis (useable for SPSS syntax) – Column coding see below

Column coding:

- **Experiment 1_reduced**
  - **Subject:** One number per participant
  - **Age:** Age per participant
  - **Handedness:** right or left
  - **Sex:** female or male
  - **Running:** Signifies the block in which the stimulus was presented: Either practice block ("Prac"), motion block ("RM1") or baseline block at the beginning ("RMOneA") or the end ("RMOneB") of the experiment
  - **V1:** Signifies the location of the first vibration – in baseline and practice trials, only one vibration / stimulus was presented, therefore this is empty.
    - **Coding of tactile locations:** location A ("53"), location B ("52"), location C ("51"), location D ("50"), location E ("49")
  - **V2:** Signifies the location of the second vibration – in baseline and practice trials, only one vibration / stimulus was presented, therefore this is empty. – coding of locations identical as under **V1**.
  - **VC:** Signifies the location of the final / to-be-judged vibration –coding of locations identical as under **V1**.
  - **TacDir:** direction of motion of the tactile stimulus, either left-to-right ("rechts") or right-to-left ("links") – only in the motion block, otherwise empty
  - **VisDir:** direction of motion of the visual stimulus, see **TacDir**
  - **Congruency:** Congruent ("con") or incongruent ("incon"), only in the motion trials, otherwise empty
  - **RespModality:** Signifies the stimulus which had to be estimated, either visual ("vis") or tactile ("tac") stimulus
  - **TrackTimeFinal:** Response time in ms
  - **YTrackedFinal:** Indicated location along the Y-axis in Pixel – higher values indicate a location lower on the screen
  - **XTrackedFinal:** Indicated location along the X-axis in Pixel – higher values indicate a location further to the right on the screen
  - **PosTarget:** Actual final X-axis location of the visual stimulus in Pixel
  - **Diff:** Difference score of actual (**PosTarget**) and estimated (**XTrackedFinal**) location in Pixel – only for visual trials – positive values indicate a localization further to the right, and negative values indicate a localization closer to the left.

- **Experiment 1_aggregated for analysis** (for both, …filter and …no_filter)
  - **Subject:** see above
  - **t_links_con_51:** estimation of tactile motion stimulus ("t"), target direction right-to-left ("links"), directional congruency as congruent ("con"), location C estimated ("51"), value signifies the variable **XTrackedFinal**
  - **t_links_con_52:** estimation of tactile motion stimulus ("t"), target direction right-to-left ("links"), directional congruency as congruent ("con"), location B estimated ("52"), value signifies the variable **XTrackedFinal**
  - **t_links_incon_51:** estimation of tactile motion stimulus ("t"), target direction right-to-left ("links"), directional congruency as incongruent ("incon"), location C estimated ("51"), value signifies the variable **XTrackedFinal**
  - **t_links_incon_52:** estimation of tactile motion stimulus ("t"), target direction right-to-left ("links"), directional congruency as incongruent ("incon"), location B estimated ("52"), value signifies the variable **XTrackedFinal**
  - **t_rechts_con_51:** estimation of tactile motion stimulus ("t"), target direction left-to-right ("rechts"), directional congruency as congruent ("con"), location C estimated ("51"), value signifies the variable **XTrackedFinal**
  - **t_rechts_con_50:** estimation of tactile motion stimulus ("t"), target direction left-to-right ("rechts"), directional congruency as congruent ("con"), location D estimated ("50") , value signifies the variable **XTrackedFinal**
  - **t_rechts_incon_51:** estimation of tactile motion stimulus ("t"), target direction left-to-right ("rechts"), directional congruency as incongruent ("incon"), location C estimated ("51") , value signifies the variable **XTrackedFinal**
  - **t_rechts_incon_50:** estimation of tactile motion stimulus ("t"), target direction left-to-right ("rechts"), directional congruency as incongruent ("incon"), location D estimated ("50") , value signifies the variable **XTrackedFinal**
  - **t_@50:** estimation of tactile baseline stimulus, location D ("50"), value signifies the variable **XTrackedFinal**
  - **t_@51:** estimation of tactile baseline stimulus, location C ("51"), value signifies the variable **XTrackedFinal**
  - **t_@52:** estimation of tactile baseline stimulus, location B ("52"), value signifies the variable **XTrackedFinal**
  - **v_links_con:** estimation of visual motion stimulus ("v"), target direction right-to-left ("links"), directional congruency as congruent ("con"), value signifies the variable **Diff**
  - **v_links_incon:** estimation of visual motion stimulus ("v"), target direction right-to-left ("links"), directional congruency as incongruent ("incon"), value signifies the variable **Diff**
  - **v_rechts_con:** estimation of visual motion stimulus ("v"), target direction left-to-right ("rechts"), directional congruency as congruent ("con), value signifies the variable **Diff**
  - **v_rechts_incon:** estimation of visual motion stimulus ("v"), target direction left-to-right ("rechts"), directional congruency as incongruent ("incon), value signifies the variable **Diff**
  - **v_@50:** estimation of visual baseline stimulus ("v"), while the location of the tactile stimulus was location D ("50"), value signifies the variable **Diff**
  - **v_@51:** estimation of visual baseline stimulus ("v"), while the location of the tactile stimulus was location C ("51"), value signifies the variable **Diff**
  - **v_@52:** estimation of visual baseline stimulus ("v"), while the location of the tactile stimulus was location B ("52"), value signifies the variable **Diff**

Data for Experiment 2

- **Experiment 2_complete data.txt**
  - All information collected throughout the experiment (Experimental Software: E-Prime)
- **Experiment 2_reduced.txt**
  - Reduced data set, irrelevant columns were filtered out
  - Column coding see below
- **Experiment 2_aggregated for analysis_no filter.sav**
  - Aggregated data for data analysis (useable for SPSS syntax) - Column coding see below
- **Experiment 2_aggregated for analysis_filter.sav**
  - Aggregated data after applying cut-off criteria (for more details, see manuscript) for data analysis (useable for SPSS syntax) – Column coding see below
- **Experiment 2_aggregated for ananlysis_central_filter.sav**
  - Aggregated data after applying cut-off criteria (for more details, see manuscript) for data analysis (useable for SPSS syntax), only central trials – Column coding see below

Column coding:

- **Experiment 2_reduced**
  - Most colums as in **Experiment 1_reduced**
  - **XTrackedFinal**: as in Experiment 1 signifies te indicated location along the X-axis in Pixel – higher values indicate a location further to the right on the touchscreen – please note: In all values, the x-axis length of the main computer screen (1920 Pixel) has to be subtracted to have the indicated X-axis value on the touchscreen.
  - **PosTargetX:** actual final X-axis location of the visual stimulus in Pixel: Please note: Overall, only 5 distinct location were used in this second experiment, only three as final locations (for more details, see the manuscript).
    - **Coding of visual locations:** location A ("110"), location B ("475"), location C ("840"), location D ("1205"), location E ("1570")
  - **PosDiffX:** Difference score of actual (**PosTargetX**) and estimated (**XTrackedFinal-**1920) location in Pixel – only for visual trials
    - For baseline and practice trials, positive values indicate a localization further to the right, and negative values indicate a localization closer to the left
    - For motion trials: positive values indicate a forward displacement in motion direction, negative values indicate a backward displacement against motion direction.
- **Experiment 2_aggregated for analysis** (for …filter and …no filter)
  - **Subject:** see above
  - For all columns except the "Subject" column, value signifies the variable **XTrackedFinal**
  - **t_links_con_central** to **v_rechts_incon_outer** are composite scores of motion trials
    - target modality: estimation of tactile ("t") or visual ("v") motion stimulus
    - target direction: right-to-left ("links") or left-to-right ("rechts")
    - directional congruency: congruent ("con") or incongruent ("incon")
    - final location: "central" location (location C) or "outer" location (location B for right-to-left; location D for left-to-right)

- - - estimation of tactile motion stimulus ("t"), target direction right-to-left ("links"), directional congruency as congruent ("con"), location C estimated ("51")
    - **t_@50_1205** to **t_@52_840** are composite scores of tactile target ("t") baseline trials
      - location of estimated tactile target: either location B ("@52"), location C ("@51"), or location D ("@50")
      - final location of irrelevant visual stimulus: either location B ("1205"), location C ("840"), or location D ("475")
    - **v_@1205_50** to **v_@840_52** are composite scores of visual target ("v") baseline trials
      - location of estimated visual target: either location B ("@475"), location C ("@840"), or location D ("@1205")
      - final location of irrelevant tactile stimulus: either location B ("52"), location C ("51"), or location D ("50")
- **Experiment 2_aggregated for analysis_central_filter**
  - In this data set, only trials in which both, the response relevant target and response irrelevant stimulus ended on location c (the central location), are included. Therefore, the column coding is identical as in the data sets Experiment 2_aggregated for analysis_filter and …no_filter, yet fewer columns exists.
  - Only central trials are used, therefore the factor target direction is dismissed for motion trials
  - Only two baseline columns exist, that is the estimation of either the visual or tactile stimulus when both stimuli are presented at the central location (either v_@840_51 or t_@51_840)