

## Information on datasheet columns

### Combined ant choices Low and High sucrose experiment datasheets

Column	Information
Date	This column recorded the date of data collection.
Time	This column recorded the time of data collection.
Observer	This column indicates the name of the experimenter who collected the data.
Colony ID	The ID of the colony is abbreviated as the colony number followed by the year of the data collection ('F' stands for Fall). It is important to note that a given colony was used only within that particular year. For example, C1F22 and C1F23 are different colonies that were used across 2022 and 2023 respectively.
Treatment	This column indicates where it was the control or experimental treatment.
Side/arm of the feeder	This column indicates the location of the feeder on the T-maze setup. The feeder was either placed on the right side or the left side on the setup.
Ant choice	This column indicates the first choice that the focal ant made. Ant could make one of the following three choices: Correct choice (going to the T-maze arm containing the feeder), Wrong choice (going to the T-maze arm not containing the feeder), OR abandoned (turn back without making any choice).

Ant fed on the feeder	This column indicates whether ant fed on the sucrose in the feeder. If the ant was on a feeder for more than 10 seconds continuously without moving, this column recorded 'Yes.'
Weather notes	This column recorded the weather (qualitatively) at the time of the experiment.
Surface temperature	This column recorded the temperature of the ground near the colony. It is important to note that we recorded this data from 2023 onwards.
Setup temperature	This column recorded the temperature of the paper overlay on the T-maze setup. It is important to note that we recorded this data from 2023 onwards.

### Combined gaster angles Low and High sucrose experiment datasheets

Column	Information
Video	This column indicates the file name of the trial video.
Frame no.	This column indicates the number of the specific frame for the given video that was used for the gaster angle measurement.
Date of the video	This column recorded the date of data collection.
Colony ID	This column recorded the colony ID (for more information see under column information in Table S1).
Data of the analysis	This column recorded the date when the video was analyzed.
Treatment	This column indicates where it was the control or experimental treatment.
Year	This column recorded the year of data collection.
Observer doing the analysis	The observer who conducted the video analysis. It is important to note that the observers who collected the data were not always the ones who analyzed the videos.
Length in pixels of Zone2	This column recorded the length of Zone 2 in the screenshot in pixels (See under 'Video analysis pipeline' below for more information)
Length in pixels of Zone1	This column recorded the length of Zone 1 in the screenshot in pixels (See under 'Video analysis pipeline' below for more information)

End of bridge	This column indicates the location of the end of the T-maze stem in the video. This could appear on the right or the left side in the video.
Ant choice	This column indicates the first choice that the focal ant made. This column only has 'Correct' as the only option because the gaster angles were analyzed only for the ants that made a correct choice.
Angle measurement 1-3	These three columns recorded the gaster angle measurements. Each row consists of 3 gaster angle measures for a given frame in a video.
Reason for NA (Angle measurement)	This column recorded why the observer could not analyze the particular frame. Some of the example responses include - 'Ant was too blurry', 'Ant not completely sideways' or 'Ant gaster not clearly visible.'
Gaster touching the paper	This column recorded whether the ant's gaster touched the paper overlay on the T-maze in the given frame. There were three possible responses here: 'Yes' (The gaster touched the paper), 'No' (The gaster did not touch the paper), OR 'NA' (The observer could not tell whether the gaster touched the paper or not).