*distance/area/movement/trajectories are calculated in euclidian millimiter

var_name

Mouse_1_poly_area

Mouse_2_poly_area

Mouse_1_nose_to_tail

Mouse_2_nose_to_tail

Mouse_1_width

Mouse_2_width

Mouse_1_Ear_distance

Mouse 2 Ear distance

Mouse_1_Nose_to_centroid

Mouse_2_Nose_to_centroid

Centroid distance

Nose_to_nose_distance

M1_Nose_to_M2_lat_left

M1_Nose_to_M2_lat_right

M2_Nose_to_M1_lat_left

M2_Nose_to_M1_lat_right

M1_Nose_to_M2_tail_base

M2_Nose_to_M1_tail_base

Movement_mouse_1_centroid

Movement_mouse_2_centroid

Movement_mouse_1_nose

Movement_mouse_2_nose

Movement_mouse_1_tail_base

Movement_mouse_2_tail_base

Movement_mouse_1_tail_end

Movement mouse 2 tail end

Movement_mouse_1_left_ear

 $Movement_mouse_2_left_ear$

Movement_mouse_1_right_ear

Movement mouse 2 right ear

Movement_mouse_1_lateral_left

Movement_mouse_2_lateral_left

Movement_mouse_1_lateral_right

Movement_mouse_2_lateral_right

Mouse_1_polygon_size_change

Mouse_2_polygon_size_change

M1_largest_euclidean_distance_hull

M1 smallest euclidean distance hull

M1 mean euclidean distance hull

M1_sum_euclidean_distance_hull

M2_largest_euclidean_distance_hull

M2 smallest euclidean distance hull

M2_mean_euclidean_distance_hull

M2_sum_euclidean_distance_hull

Sum_euclidean_distance_hull_M1_M2

Total_movement_centroids

Total_movement_tail_ends

Total_movement_all_bodyparts_M1

Total_movement_all_bodyparts_M2

Total_movement_all_bodyparts_both_mice

Sum_euclid_distances_hull_median_2

Sum euclid distances hull mean 2

Sum_euclid_distances_hull_sum_2

Sum_euclid_distances_hull_median_5

Sum_euclid_distances_hull_mean_5

Sum_euclid_distances_hull_sum_5

Sum_euclid_distances_hull_median_6

Sum_euclid_distances_hull_mean_6

Sum_euclid_distances_hull_sum_6

Sum_euclid_distances_hull_median_7.5

Sum_euclid_distances_hull_mean_7.5

Sum_euclid_distances_hull_sum_7.5

Sum_euclid_distances_hull_median_15

Sum_euclid_distances_hull_mean_15

Sum_euclid_distances_hull_sum_15

Movement_median_2

Movement_mean_2

Movement_sum_2

Movement_median_5

Movement mean 5

Movement_sum_5

Movement_median_6

Movement mean 6

Movement_sum_6

Movement_median_7.5

Movement_mean_7.5

Movement_sum_7.5

Movement_median_15

Movement_mean_15

Movement_sum_15

Distance_median_2

Distance mean 2

Distance sum 2

Distance_median_5

Distance_mean_5

Distance sum 5

Distance_median_6

Distance_mean_6

Distance_sum_6

Distance_median_7.5

Distance_mean_7.5

Distance_sum_7.5

Distance_median_15

Distance_mean_15

Distance_sum_15

Mouse1 width median 2

Mouse1_width_mean_2

Mouse1_width_sum_2

Mouse1_width_median_5

Mouse1_width_mean_5

Mouse1_width_sum_5

Mouse1_width_median_6

Mouse1_width_mean_6

Mouse1_width_sum_6

Mouse1_width_median_7.5

Mouse1_width_mean_7.5

Mouse1_width_sum_7.5

Mouse1_width_median_15

Mouse1_width_mean_15

Mouse1_width_sum_15

Mouse2_width_median_2

Mouse2_width_mean_2

Mouse2_width_sum_2

Mouse2 width median 5

Mouse2_width_mean_5

Mouse2_width_sum_5

Mouse2_width_median_6

Mouse2_width_mean_6

Mouse2_width_sum_6

Mouse2_width_median_7.5

Mouse2_width_mean_7.5

Mouse2_width_sum_7.5

Mouse2_width_median_15

Mouse2_width_mean_15

Mouse2_width_sum_15

Mouse1 mean euclid distances median 2

Mouse1 mean euclid distances mean 2

Mouse1_mean_euclid_distances_sum_2

Mouse1_mean_euclid_distances_median_5

Mouse1 mean euclid distances mean 5

- Mouse1_mean_euclid_distances_sum_5
- Mouse1_mean_euclid_distances_median_6
- Mouse1_mean_euclid_distances_mean_6
- Mouse1_mean_euclid_distances_sum_6
- Mouse1_mean_euclid_distances_median_7.5
- Mouse1 mean euclid distances mean 7.5
- Mouse1_mean_euclid_distances_sum_7.5
- Mouse1_mean_euclid_distances_median_15
- Mouse1_mean_euclid_distances_mean_15
- Mouse1 mean euclid distances sum 15
- Mouse2_mean_euclid_distances_median_2
- Mouse2_mean_euclid_distances_mean_2
- Mouse2 mean euclid distances sum 2
- Mouse2 mean euclid distances median 5
- Mouse2_mean_euclid_distances_mean_5
- Mouse2_mean_euclid_distances_sum_5
- Mouse2_mean_euclid_distances_median_6
- Mouse2_mean_euclid_distances_mean_6
- Mouse2_mean_euclid_distances_sum_6
- Mouse2_mean_euclid_distances_median_7.5
- Mouse2_mean_euclid_distances_mean_7.5
- Mouse2 mean euclid distances sum 7.5
- Mouse2 mean euclid distances median 15
- Mouse2_mean_euclid_distances_mean_15
- Mouse2_mean_euclid_distances_sum_15
- Mouse1_smallest_euclid_distances_median_2
- Mouse1_smallest_euclid_distances_mean_2
- Mouse1 smallest euclid distances sum 2
- Mouse1_smallest_euclid_distances_median_5
- Mouse1_smallest_euclid_distances_mean_5
- Mouse1 smallest euclid distances sum 5
- Mouse1 smallest euclid distances median 6
- Mouse1_smallest_euclid_distances_mean_6
- Mouse1_smallest_euclid_distances_sum_6
- Mouse1_smallest_euclid_distances_median_7.5
- Mouse1_smallest_euclid_distances_mean_7.5
- Mouse1_smallest_euclid_distances_sum_7.5
- Mouse1_smallest_euclid_distances_median_15
- Mouse1_smallest_euclid_distances_mean_15
- Mouse1 smallest euclid distances sum 15
- Mouse2 smallest euclid distances median 2
- Mouse2_smallest_euclid_distances_mean_2
- Mouse2_smallest_euclid_distances_sum_2
- Mouse2 smallest euclid distances median 5

```
Mouse2_smallest_euclid_distances_mean_5
```

- Mouse2_smallest_euclid_distances_sum_7.5
- Mouse2_smallest_euclid_distances_median_15
- Mouse2 smallest euclid distances mean 15
- Mouse2_smallest_euclid_distances_sum_15
- Mouse1_largest_euclid_distances_median_2
- Mouse1_largest_euclid_distances_mean_2
- Mouse1_largest_euclid_distances_sum_2
- Mouse1_largest_euclid_distances_median_5
- Mouse1_largest_euclid_distances_mean_5
- Mouse1_largest_euclid_distances_sum_5
- Mouse1_largest_euclid_distances_median_6
- Mouse1_largest_euclid_distances_mean_6
- Mouse1_largest_euclid_distances_sum_6
- Mouse1_largest_euclid_distances_median_7.5
- Mouse1_largest_euclid_distances_mean_7.5
- Mouse1_largest_euclid_distances_sum_7.5
- Mouse1_largest_euclid_distances_median_15
- Mouse1_largest_euclid_distances_mean_15
- Mouse1_largest_euclid_distances_sum_15
- Mouse2_largest_euclid_distances_median_2
- Mouse2 largest euclid distances mean 2
- Mouse2_largest_euclid_distances_sum_2
- Mouse2_largest_euclid_distances_median_5
- Mouse2 largest euclid distances mean 5
- Mouse2_largest_euclid_distances_sum_5
- Mouse2_largest_euclid_distances_median_6
- Mouse2_largest_euclid_distances_mean_6
- Mouse2_largest_euclid_distances_sum_6
- Mouse2_largest_euclid_distances_median_7.5
- Mouse2_largest_euclid_distances_mean_7.5
- Mouse2_largest_euclid_distances_sum_7.5
- Mouse2_largest_euclid_distances_median_15
- Mouse2 largest euclid distances mean 15
- Mouse2 largest euclid distances sum 15
- Total_movement_all_bodyparts_both_mice_median_2
- Total_movement_all_bodyparts_both_mice_mean_2
- Total_movement_all_bodyparts_both_mice_sum_2

```
Total_movement_all_bodyparts_both_mice_median_5
```

Total_movement_all_bodyparts_both_mice_mean_5

Total_movement_all_bodyparts_both_mice_sum_5

Total_movement_all_bodyparts_both_mice_median_6

Total_movement_all_bodyparts_both_mice_mean_6

Total_movement_all_bodyparts_both_mice_sum_6

Total_movement_all_bodyparts_both_mice_median_7.5

Total_movement_all_bodyparts_both_mice_mean_7.5

Total_movement_all_bodyparts_both_mice_sum_7.5

Total_movement_all_bodyparts_both_mice_median_15

Total_movement_all_bodyparts_both_mice_mean_15

Total_movement_all_bodyparts_both_mice_sum_15

Total_movement_centroids_median_2

Total_movement_centroids_mean_2

Total_movement_centroids_sum_2

Total_movement_centroids_median_5

Total_movement_centroids_mean_5

Total_movement_centroids_sum_5

Total_movement_centroids_median_6

Total_movement_centroids_mean_6

Total_movement_centroids_sum_6

Total_movement_centroids_median_7.5

Total_movement_centroids_mean_7.5

Total_movement_centroids_sum_7.5

Total_movement_centroids_median_15

Total_movement_centroids_mean_15

Total_movement_centroids_sum_15

Tail base movement M1 median 2

Tail_base_movement_M1_mean_2

Tail_base_movement_M1_sum_2

Tail_base_movement_M1_median_5

Tail_base_movement_M1_mean_5

Tail_base_movement_M1_sum_5

Tail_base_movement_M1_median_6

Tail_base_movement_M1_mean_6

Tail_base_movement_M1_sum_6

Tail_base_movement_M1_median_7.5

Tail_base_movement_M1_mean_7.5

Tail_base_movement_M1_sum_7.5

Tail base movement M1 median 15

Tail base movement M1 mean 15

Tail_base_movement_M1_sum_15

Tail_base_movement_M2_median_2

Tail_base_movement_M2_mean_2

- Tail_base_movement_M2_sum_2
- Tail_base_movement_M2_median_5
- Tail_base_movement_M2_mean_5
- Tail_base_movement_M2_sum_5
- Tail_base_movement_M2_median_6
- Tail_base_movement_M2_mean_6
- Tail_base_movement_M2_sum_6
- Tail_base_movement_M2_median_7.5
- Tail_base_movement_M2_mean_7.5
- Tail base movement M2 sum 7.5
- Tail_base_movement_M2_median_15
- Tail_base_movement_M2_mean_15
- Tail base movement M2 sum 15
- Centroid movement M1 median 2
- Centroid_movement_M1_mean_2
- Centroid_movement_M1_sum_2
- Centroid_movement_M1_median_5
- Centroid_movement_M1_mean_5
- Centroid_movement_M1_sum_5
- Centroid_movement_M1_median_6
- Centroid_movement_M1_mean_6
- Centroid_movement_M1_sum_6
- Centroid movement M1 median 7.5
- Centroid_movement_M1_mean_7.5
- Centroid_movement_M1_sum_7.5
- Centroid_movement_M1_median_15
- Centroid_movement_M1_mean_15
- Centroid movement M1 sum 15
- Centroid_movement_M2_median_2
- Centroid_movement_M2_mean_2
- Centroid movement M2 sum 2
- Centroid_movement_M2_median_5
- Centroid_movement_M2_mean_5
- Centroid_movement_M2_sum_5
- Centroid_movement_M2_median_6
- Centroid_movement_M2_mean_6
- Centroid_movement_M2_sum_6
- Centroid_movement_M2_median_7.5
- Centroid_movement_M2_mean_7.5
- Centroid movement M2 sum 7.5
- Centroid movement M2 median 15
- Centroid_movement_M2_mean_15
- Centroid_movement_M2_sum_15
- Tail end movement M1 median 2

- Tail_end_movement_M1_mean_2
- Tail_end_movement_M1_sum_2
- Tail_end_movement_M1_median_5
- Tail_end_movement_M1_mean_5
- Tail_end_movement_M1_sum_5
- Tail_end_movement_M1_median_6
- Tail_end_movement_M1_mean_6
- Tail_end_movement_M1_sum_6
- Tail_end_movement_M1_median_7.5
- Tail end movement M1 mean 7.5
- Tail_end_movement_M1_sum_7.5
- Tail_end_movement_M1_median_15
- Tail end movement M1 mean 15
- Tail_end_movement_M1_sum_15
- Tail_end_movement_M2_median_2
- Tail_end_movement_M2_mean_2
- Tail_end_movement_M2_sum_2
- Tail_end_movement_M2_median_5
- Tail_end_movement_M2_mean_5
- Tail_end_movement_M2_sum_5
- Tail_end_movement_M2_median_6
- Tail_end_movement_M2_mean_6
- Tail_end_movement_M2_sum_6
- Tail_end_movement_M2_median_7.5
- Tail_end_movement_M2_mean_7.5
- Tail_end_movement_M2_sum_7.5
- Tail_end_movement_M2_median_15
- Tail end movement M2 mean 15
- Tail_end_movement_M2_sum_15
- Nose_movement_M1_median_2
- Nose movement M1 mean 2
- Nose movement M1 sum 2
- Nose_movement_M1_median_5
- Nose_movement_M1_mean_5
- Nose_movement_M1_sum_5
- Nose_movement_M1_median_6
- Nose_movement_M1_mean_6
- Nose_movement_M1_sum_6
- Nose_movement_M1_median_7.5
- Nose movement M1 mean 7.5
- Nose movement M1 sum 7.5
- Nose_movement_M1_median_15
- Nose_movement_M1_mean_15
- Nose movement M1 sum 15

```
Nose_movement_M2_median_2
```

Nose_movement_M2_mean_2

Nose_movement_M2_sum_2

Nose_movement_M2_median_5

Nose_movement_M2_mean_5

Nose_movement_M2_sum_5

Nose_movement_M2_median_6

Nose_movement_M2_mean_6

Nose_movement_M2_sum_6

Nose movement M2 median 7.5

Nose_movement_M2_mean_7.5

Nose_movement_M2_sum_7.5

Nose movement M2 median 15

Nose_movement_M2_mean_15

Nose_movement_M2_sum_15

Tail_end_relative_to_tail_base_centroid_nose

Tail_end_relative_to_tail_base_centroid_nose_M1_2

Tail_end_relative_to_tail_base_centroid_nose_M2_mean_2

Tail_end_relative_to_tail_base_centroid_nose_M1_5

Tail_end_relative_to_tail_base_centroid_nose_M2_mean_5

Tail_end_relative_to_tail_base_centroid_nose_M1_6

Tail_end_relative_to_tail_base_centroid_nose_M2_mean_6

Tail_end_relative_to_tail_base_centroid_nose_M1_7.5

Tail_end_relative_to_tail_base_centroid_nose_M2_mean_7.5

Tail_end_relative_to_tail_base_centroid_nose_M1_15

Tail_end_relative_to_tail_base_centroid_nose_M2_mean_15

Mouse_1_angle

Mouse 2 angle

Total_angle_both_mice

Total_angle_both_mice_2

Total angle both mice 5

Total angle both mice 6

Total_angle_both_mice_7.5

Total_angle_both_mice_15

Total_movement_all_bodyparts_both_mice_deviation

Sum_euclid_distances_hull_deviation

M1_smallest_euclid_distances_hull_deviation

M1_largest_euclid_distances_hull_deviation

M1_mean_euclid_distances_hull_deviation

Centroid distance deviation

Total angle both mice deviation

Movement_mouse_1_deviation_centroid

Movement_mouse_2_deviation_centroid

Mouse 1 polygon deviation

Mouse_2_polygon_deviation

Total_movement_all_bodyparts_both_mice_mean_2_deviation

Total_movement_all_bodyparts_both_mice_mean_5_deviation

Total_movement_all_bodyparts_both_mice_mean_6_deviation

Total_movement_all_bodyparts_both_mice_mean_7.5_deviation

Total_movement_all_bodyparts_both_mice_mean_15_deviation

Sum_euclid_distances_hull_mean_2_deviation

Sum_euclid_distances_hull_mean_5_deviation

Sum_euclid_distances_hull_mean_6_deviation

Sum euclid distances hull mean 7.5 deviation

Sum_euclid_distances_hull_mean_15_deviation

Mouse1_smallest_euclid_distances_mean_2_deviation

Mouse1 smallest euclid distances mean 5 deviation

Mouse1_smallest_euclid_distances_mean_6_deviation

Mouse1_smallest_euclid_distances_mean_7.5_deviation

Mouse1_smallest_euclid_distances_mean_15_deviation

Mouse1_largest_euclid_distances_mean_2_deviation

Mouse1_largest_euclid_distances_mean_5_deviation

Mouse1_largest_euclid_distances_mean_6_deviation

Mouse1_largest_euclid_distances_mean_7.5_deviation

Mouse1_largest_euclid_distances_mean_15_deviation

Mouse1_mean_euclid_distances_mean_2_deviation

Mouse1_mean_euclid_distances_mean_5_deviation

Mouse1_mean_euclid_distances_mean_6_deviation

Mouse1_mean_euclid_distances_mean_7.5_deviation

Mouse1_mean_euclid_distances_mean_15_deviation

Movement_mean_2_deviation

Movement mean 5 deviation

Movement_mean_6_deviation

Movement_mean_7.5_deviation

Movement_mean_15_deviation

Distance mean 2 deviation

Distance_mean_5_deviation

Distance_mean_6_deviation

Distance_mean_7.5_deviation

Distance_mean_15_deviation

Total_angle_both_mice_2_deviation

Total_angle_both_mice_5_deviation

Total_angle_both_mice_6_deviation

Total_angle_both_mice_7.5_deviation

Total angle both mice 15 deviation

Movement_percentile_rank

Distance_percentile_rank

Movement_mouse_1_percentile_rank

Movement_mouse_2_percentile_rank

Movement_mouse_1_deviation_percentile_rank

Movement_mouse_2_deviation_percentile_rank

Centroid_distance_percentile_rank

Centroid_distance_deviation_percentile_rank

Total_movement_all_bodyparts_both_mice_mean_2_percentile_rank

Total_movement_all_bodyparts_both_mice_mean_5_percentile_rank

Total_movement_all_bodyparts_both_mice_mean_6_percentile_rank

Total_movement_all_bodyparts_both_mice_mean_7.5_percentile_rank

Total_movement_all_bodyparts_both_mice_mean_15_percentile_rank

Sum_euclid_distances_hull_mean_2_percentile_rank

Sum_euclid_distances_hull_mean_5_percentile_rank

Sum_euclid_distances_hull_mean_6_percentile_rank

Sum_euclid_distances_hull_mean_7.5_percentile_rank

Sum_euclid_distances_hull_mean_15_percentile_rank

Mouse1_mean_euclid_distances_mean_2_percentile_rank

Mouse1_mean_euclid_distances_mean_5_percentile_rank

Mouse1_mean_euclid_distances_mean_6_percentile_rank

Mouse1_mean_euclid_distances_mean_7.5_percentile_rank

Mouse1_mean_euclid_distances_mean_15_percentile_rank

Mouse1_smallest_euclid_distances_mean_2_percentile_rank

Mouse1_smallest_euclid_distances_mean_5_percentile_rank

Mouse1_smallest_euclid_distances_mean_6_percentile_rank

Mouse1_smallest_euclid_distances_mean_7.5_percentile_rank

Mouse1_smallest_euclid_distances_mean_15_percentile_rank

Mouse1_largest_euclid_distances_mean_2_percentile_rank

Mouse1_largest_euclid_distances_mean_5_percentile_rank

Mouse1_largest_euclid_distances_mean_6_percentile_rank

Mouse1_largest_euclid_distances_mean_7.5_percentile_rank

Mouse1_largest_euclid_distances_mean_15_percentile_rank

Movement_mean_2_percentile_rank

Movement_mean_5_percentile_rank

Movement_mean_6_percentile_rank

Movement_mean_7.5_percentile_rank

Movement_mean_15_percentile_rank

Distance_mean_2_percentile_rank

Distance_mean_5_percentile_rank

Distance_mean_6_percentile_rank

Distance_mean_7.5_percentile_rank

Distance_mean_15_percentile_rank

Tortuosity Mouse1 2

Tortuosity_Mouse1_5

Tortuosity_Mouse1_6

Tortuosity Mouse1 7.5

Tortuosity_Mouse1_15
Sum_probabilities
Sum_probabilities_deviation
Sum_probabilities_deviation_percentile_rank
Sum_probabilities_percentile_rank
Low_prob_detections_0.1
Low_prob_detections_0.5
Low_prob_detections_0.75

description*

area of CD1 convex hull

area of C57 convex hull

distance between CD1 nose and tail

distance between C57 nose and tail

distance between CD1 lateral left and lateral right

distance between C57 lateral left to lateral right

distance between CD1 left ear and right ear

distance between C57 left ear and right ear

distance between CD1 nose and centroid

distance between C57 nose and centroid

distance between the centroid of the CD1 and centroid of the C57

distance between the nose of the CD1 and nose of the C57

distance between the nose of the CD1 and lateral left side of the C57

distance between the nose of the CD1 and lateral right side of the C57

distance between the nose of the C57 and lateral left side of the CD1

distance between the nose of the C57 and lateral right side of the CD1

distance between the nose of the CD1 and tail-base of the C57

distance between the nose of the C57 and tail-base of the CD1

movements of CD1 centroid from previous frame

movements of C57 centroid from previous frame

movements of CD1 nose from previous frame

movements of C57 nose from previous frame

movements of CD1 tail base from previous frame

movements of C57 tail base from previous frame

movements of CD1 tail end from previous frame

movements of C57 tail end from previous frame

movements of CD1 left ear from previous frame

movements of C57 left ear from previous frame

movements of CD1 right ear from previous frame

movements of C57 right ear from previous frame

movements of CD1 lateral left side from previous frame

movements of C57 lateral left side from previous frame

movements of CD1 lateral right side from previous frame

movements of C57 lateral right side from previous frame

The change in area size of CD1 convex hull from previous frame

The change in area size of C57 convex hull from previous frame

The longest distance between any two CD1 bodypart coordinates in the convex hull

The shortest distance between any two CD1 bodypart coordinates in the convex hull

The average distance between any two CD1 bodypart coordinates in the convex hull

The sum of distances between CD1 bodypart coordinates in the convex hull

The longest distance between any two C57 bodypart coordinates in the convex hull

The shortest distance between any two C57 bodypart coordinates in the convex hull

The average distance between any two C57 bodypart coordinates in the convex hull

The sum of all distances between C57 bodypart coordinates in the convex hull

The sum of distances between all C57 bodyparts coordinates and CD1 bodypart coordinates in the convex hu

The sum of movement of the CD1 centroid and C57 centroid from previous frame

The sum of movement of the CD1 tail end and C57 tail end from previous frame

The sum of movements of all CD1 body parts from previous frame

The sum of movements of all C57 body parts from previous frame

The sum of movements of all C57 body-parts and CD1 body-parts from previous frame

The median sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 500ms

The mean sum of distances between all C57 bodyparts, and CD1 bodyparst, in the last 500ms

The sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 500ms

The median sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 200ms

The mean sum of distances between all C57 bodyparts, and CD1 bodyparst, in the last 200ms

The sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 200ms

The median sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 166ms

The mean sum of distances between all C57 bodyparts, and CD1 bodyparst, in the last 166ms

The sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 166ms

The median sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 133ms

The mean sum of distances between all C57 bodyparts, and CD1 bodyparst, in the last 133ms

The sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 133ms

The median sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 66ms

The mean sum of distances between all C57 bodyparts, and CD1 bodyparst, in the last 66ms

The sum of distances between all C57 bodyparts, and CD1 bodyparts, in the last 66ms

The median of CD1 and C57 centroid movements in the last 500ms

The mean of CD1 and C57 centroid movements in the last 500ms

The sum of CD1 and C57 centroid movements in the last 500ms

The median of CD1 and C57 centroid movements in the last 200ms

The mean of CD1 and C57 centroid movements in the last 200ms

The sum of CD1 and C57 centroid movements in the last 200ms

The median of CD1 and C57 centroid movements in the last 166ms

The mean of CD1 and C57 centroid movements in the last 166ms

The sum of CD1 and C57 centroid movements in the last 166ms

The median of CD1 and C57 centroid movements in the last 133ms

The mean of CD1 and C57 centroid movements in the last 133ms

The sum of CD1 and C57 centroid movements in the last 133ms

The median of CD1 and C57 centroid movements in the last 66ms

The mean of CD1 and C57 centroid movements in the last 66ms

The sum of CD1 and C57 centroid movements in the last 66ms

The median CD1 and C57 centroid distances in the last 500ms

The mean CD1 and C57 centroid distances in the last 500ms

The sum CD1 and C57 centroid distances in the last 500ms

The median CD1 and C57 centroid distances in the last 200ms

The mean CD1 and C57 centroid distances in the last 200ms

The sum CD1 and C57 centroid distances in the last 200ms

The median CD1 and C57 centroid distances in the last 166ms The mean CD1 and C57 centroid distances in the last 166ms The sum CD1 and C57 centroid distances in the last 166ms The median CD1 and C57 centroid distances in the last 133ms The mean CD1 and C57 centroid distances in the last 133ms The sum CD1 and C57 centroid distances in the last 133ms The median CD1 and C57 centroid distances in the last 66ms The mean CD1 and C57 centroid distances in the last 66ms The sum CD1 and C57 centroid distances in the last 66ms The median distances between CD1 lateral left and lateral right in the last 500ms The mean distances between CD1 lateral left and lateral right in the last 500ms The sum distance between CD1 lateral left and lateral right in the last 500ms The median distances between CD1 lateral left and lateral right in the last 200ms The mean distances between CD1 lateral left and lateral right in the last 200ms The sum distance between CD1 lateral left and lateral right in the last 200ms The median distances between CD1 lateral left and lateral right in the last 166ms The mean distances between CD1 lateral left and lateral right in the last 166ms The sum distance between CD1 lateral left and lateral right in the last 166ms The median distances between CD1 lateral left and lateral right in the last 133ms The mean distances between CD1 lateral left and lateral right in the last 133ms The sum distance between CD1 lateral left and lateral right in the last 133ms The median distances between CD1 lateral left and lateral right in the last 66ms The mean distances between CD1 lateral left and lateral right in the last 66ms The sum distance between CD1 lateral left and lateral right in the last 66ms The median distances between C57 lateral left and lateral right in the last 500ms The mean distances between C57 lateral left and lateral right in the last 500ms The sum distance between C57 lateral left and lateral right in the last 500ms The median distances between C57 lateral left and lateral right in the last 200ms The mean distances between C57 lateral left and lateral right in the last 200ms The sum distance between C57 lateral left and lateral right in the last 200ms The median distances between C57 lateral left and lateral right in the last 166ms The mean distances between C57 lateral left and lateral right in the last 166ms The sum distance between C57 lateral left and lateral right in the last 166ms The median distances between C57 lateral left and lateral right in the last 133ms The mean distances between C57 lateral left and lateral right in the last 133ms The sum distance between C57 lateral left and lateral right in the last 133ms The median distances between C57 lateral left and lateral right in the last 66ms The mean distances between C57 lateral left and lateral right in the last 66ms The sum distance between C57 lateral left and lateral right in the last 66ms The median of distances between CD1 bodyparts in the last 500ms The mean of distances between CD1 bodyparts in the last 500ms The sum distances between CD1 bodyparts in the last 500ms The median of distances between CD1 bodyparts in the last 200ms The mean of distances between CD1 bodyparts in the last 200ms

The sum distances between CD1 bodyparts in the last 200ms The median of distances between CD1 bodyparts in the last 166ms The mean of distances between CD1 bodyparts in the last 166ms The sum distances between CD1 bodyparts in the last 166ms The median of distances between CD1 bodyparts in the last 133ms The mean of distances between CD1 bodyparts in the last 133ms The sum distances between CD1 bodyparts in the last 133ms The median of distances between CD1 bodyparts in the last 66ms The mean of distances between CD1 bodyparts in the last 66ms The sum distances between CD1 bodyparts in the last 66ms The median of distances between C57 bodyparts in the last 500ms The mean of distances between C57 bodyparts in the last 500ms The sum distances between C57 bodyparts in the last 500ms The median of distances between C57 bodyparts in the last 200ms The mean of distances between C57 bodyparts in the last 200ms The sum distances between C57 bodyparts in the last 200ms The median of distances between C57 bodyparts in the last 166ms The mean of distances between C57 bodyparts in the last 166ms The sum distances between C57 bodyparts in the last 166ms The median of distances between C57 bodyparts in the last 133ms The mean of distances between C57 bodyparts in the last 133ms The sum distances between C57 bodyparts in the last 133ms The median of distances between C57 bodyparts in the last 66ms The mean of distances between C57 bodyparts in the last 66ms The sum distances between C57 bodyparts in the last 66ms The median shortest distances between CD1 bodyparts in the last 500ms The mean shortest distances between CD1 bodyparts in the last 500ms The sum of shortest distances between CD1 bodyparts in the last 500ms The median shortest distances between CD1 bodyparts in the last 200ms The mean shortest distances between CD1 bodyparts in the last 200ms The sum of shortest distances between CD1 bodyparts in the last 200ms The median shortest distances between CD1 bodyparts in the last 166ms The mean shortest distances between CD1 bodyparts in the last 166ms The sum of shortest distances between CD1 bodyparts in the last 166ms The median shortest distances between CD1 bodyparts in the last 133ms The mean shortest distances between CD1 bodyparts in the last 133ms The sum of shortest distances between CD1 bodyparts in the last 133ms The median shortest distances between CD1 bodyparts in the last 66ms The mean shortest distances between CD1 bodyparts in the last 66ms The sum of shortest distances between CD1 bodyparts in the last 66ms The median shortest distances between C57 bodyparts in the last 500ms The mean shortest distances between C57 bodyparts in the last 500ms The sum of shortest distances between C57 bodyparts in the last 500ms The median shortest distances between C57 bodyparts in the last 200ms

The mean shortest distances between C57 bodyparts in the last 200ms The sum of shortest distances between C57 bodyparts in the last 200ms The median shortest distances between C57 bodyparts in the last 166ms The mean shortest distances between C57 bodyparts in the last 166ms The sum of shortest distances between C57 bodyparts in the last 166ms The median shortest distances between C57 bodyparts in the last 133ms The mean shortest distances between C57 bodyparts in the last 133ms The sum of shortest distances between C57 bodyparts in the last 133ms The median shortest distances between C57 bodyparts in the last 66ms The mean shortest distances between C57 bodyparts in the last 66ms The sum of shortest distances between C57 bodyparts in the last 66ms The median longest distances between CD1 bodyparts in the last 500ms The mean longest distances between CD1 bodyparts in the last 500ms The sum of longest distances between CD1 bodyparts in the last 500ms The median longest distances between CD1 bodyparts in the last 200ms The mean longest distances between CD1 bodyparts in the last 200ms The sum of longest distances between CD1 bodyparts in the last 200ms The median longest distances between CD1 bodyparts in the last 166ms The mean longest distances between CD1 bodyparts in the last 166ms The sum of longest distances between CD1 bodyparts in the last 166ms The median longest distances between CD1 bodyparts in the last 133ms The mean longest distances between CD1 bodyparts in the last 133ms The sum of longest distances between CD1 bodyparts in the last 133ms The median longest distances between CD1 bodyparts in the last 66ms The mean longest distances between CD1 bodyparts in the last 66ms The sum of longest distances between CD1 bodyparts in the last 66ms The median longest distances between C57 bodyparts in the last 500ms The mean longest distances between C57 bodyparts in the last 500ms The sum of longest distances between C57 bodyparts in the last 500ms The median longest distances between C57 bodyparts in the last 200ms The mean longest distances between C57 bodyparts in the last 200ms The sum of longest distances between C57 bodyparts in the last 200ms The median longest distances between C57 bodyparts in the last 166ms The mean longest distances between C57 bodyparts in the last 166ms The sum of longest distances between C57 bodyparts in the last 166ms The median longest distances between C57 bodyparts in the last 133ms The mean longest distances between C57 bodyparts in the last 133ms The sum of longest distances between C57 bodyparts in the last 133ms The median longest distances between C57 bodyparts in the last 66ms The mean longest distances between C57 bodyparts in the last 66ms The sum of longest distances between C57 bodyparts in the last 66ms Median of all CD1 and C57 bodypart movements in the last 500ms Mean of all CD1 and C57 bodypart movements in the last 500ms Sum of all CD1 and C57 bodypart movements in the last 500ms

Median of all CD1 and C57 bodypart movements in the last 200ms Mean of all CD1 and C57 bodypart movements in the last 200ms Sum of all CD1 and C57 bodypart movements in the last 200ms Median of all CD1 and C57 bodypart movements in the last 166ms Mean of all CD1 and C57 bodypart movements in the last 166ms Sum of all CD1 and C57 bodypart movements in the last 166ms Median of all CD1 and C57 bodypart movements in the last 133ms Mean of all CD1 and C57 bodypart movements in the last 133ms Sum of all CD1 and C57 bodypart movements in the last 133ms Median of all CD1 and C57 bodypart movements in the last 66ms Mean of all CD1 and C57 bodypart movements in the last 66ms Sum of all CD1 and C57 bodypart movements in the last 66ms Median of all CD1 and C57 centroid movements in the last 500ms Mean of all CD1 and C57 centroid movements in the last 500ms Sum of all CD1 and C57 centroid movements in the last 500ms Median of all CD1 and C57 centroid movements in the last 200ms Mean of all CD1 and C57 centroid movements in the last 200ms Sum of all CD1 and C57 centroid movements in the last 200ms Median of all CD1 and C57 centroid movements in the last 166ms Mean of all CD1 and C57 centroid movements in the last 166ms Sum of all CD1 and C57 centroid movements in the last 166ms Median of all CD1 and C57 centroid movements in the last 133ms Mean of all CD1 and C57 centroid movements in the last 133ms Sum of all CD1 and C57 centroid movements in the last 133ms Median of all CD1 and C57 centroid movements in the last 66ms Mean of all CD1 and C57 centroid movements in the last 66ms Sum of all CD1 and C57 centroid movements in the last 66ms Median movement of the CD1 tail base in the last 500ms Mean movement of the CD1 tail base in the last 500ms Sum movement of the CD1 tail base in the last 500ms Median movement of the CD1 tail base in the last 200ms Mean movement of the CD1 tail base in the last 200ms Sum movement of the CD1 tail base in the last 200ms Median movement of the CD1 tail base in the last 166ms Mean movement of the CD1 tail base in the last 166ms Sum movement of the CD1 tail base in the last 166ms Median movement of the CD1 tail base in the last 133ms Mean movement of the CD1 tail base in the last 133ms Sum movement of the CD1 tail base in the last 133ms Median movement of the CD1 tail base in the last 66ms Mean movement of the CD1 tail base in the last 66ms Sum movement of the CD1 tail base in the last 66ms Median movement of the C57 tail base in the last 500ms Mean movement of the C57 tail base in the last 500ms

Sum movement of the C57 tail base in the last 500ms Median movement of the C57 tail base in the last 200ms Mean movement of the C57 tail base in the last 200ms Sum movement of the C57 tail base in the last 200ms Median movement of the C57 tail base in the last 166ms Mean movement of the C57 tail base in the last 166ms Sum movement of the C57 tail base in the last 166ms Median movement of the C57 tail base in the last 133ms Mean movement of the C57 tail base in the last 133ms Sum movement of the C57 tail base in the last 133ms Median movement of the C57 tail base in the last 66ms Mean movement of the C57 tail base in the last 66ms Sum movement of the C57 tail base in the last 66ms Median movement of the CD1 centroid in the last 500ms Mean movement of the CD1 centroid in the last 500ms Sum movement of the CD1 centroid in the last 500ms Median movement of the CD1 centroid in the last 200ms Mean movement of the CD1 centroid in the last 200ms Sum movement of the CD1 centroid in the last 200ms Median movement of the CD1 centroid in the last 166ms Mean movement of the CD1 centroid in the last 166ms Sum movement of the CD1 centroid in the last 166ms Median movement of the CD1 centroid in the last 133ms Mean movement of the CD1 centroid in the last 133ms Sum movement of the CD1 centroid in the last 133ms Median movement of the CD1 centroid in the last 66ms Mean movement of the CD1 centroid in the last 66ms Sum movement of the CD1 centroid in the last 66ms Median movement of the C57 centroid in the last 500ms Mean movement of the C57 centroid in the last 500ms Sum movement of the C57 centroid in the last 500ms Median movement of the C57 centroid in the last 200ms Mean movement of the C57 centroid in the last 200ms Sum movement of the C57 centroid in the last 200ms Median movement of the C57 centroid in the last 166ms Mean movement of the C57 centroid in the last 166ms Sum movement of the C57 centroid in the last 166ms Median movement of the C57 centroid in the last 133ms Mean movement of the C57 centroid in the last 133ms Sum movement of the C57 centroid in the last 133ms Median movement of the C57 centroid in the last 66ms Mean movement of the C57 centroid in the last 66ms Sum movement of the C57 centroid in the last 66ms Median movement of the CD1 tail end in the last 500ms

Mean movement of the CD1 tail end in the last 500ms Sum movement of the CD1 tail end in the last 500ms Median movement of the CD1 tail end in the last 200ms Mean movement of the CD1 tail end in the last 200ms Sum movement of the CD1 tail end in the last 200ms Median movement of the CD1 tail end in the last 166ms Mean movement of the CD1 tail end in the last 166ms Sum movement of the CD1 tail end in the last 166ms Median movement of the CD1 tail end in the last 133ms Mean movement of the CD1 tail end in the last 133ms Sum movement of the CD1 tail end in the last 133ms Median movement of the CD1 tail end in the last 66ms Mean movement of the CD1 tail end in the last 66ms Sum movement of the CD1 tail end in the last 66ms Median movement of the C57 tail end in the last 500ms Mean movement of the C57 tail end in the last 500ms Sum movement of the C57 tail end in the last 500ms Median movement of the C57 tail end in the last 200ms Mean movement of the C57 tail end in the last 200ms Sum movement of the C57 tail end in the last 200ms Median movement of the C57 tail end in the last 166ms Mean movement of the C57 tail end in the last 166ms Sum movement of the C57 tail end in the last 166ms Median movement of the C57 tail end in the last 133ms Mean movement of the C57 tail end in the last 133ms Sum movement of the C57 tail end in the last 133ms Median movement of the C57 tail end in the last 66ms Mean movement of the C57 tail end in the last 66ms Sum movement of the C57 tail end in the last 66ms Median movement of the CD1 nose in the last 500ms Mean movement of the CD1 nose in the last 500ms Sum movement of the CD1 nose in the last 500ms Median movement of the CD1 nose in the last 200ms Mean movement of the CD1 nose in the last 200ms Sum movement of the CD1 nose in the last 200ms Median movement of the CD1 nose in the last 166ms Mean movement of the CD1 nose in the last 166ms Sum movement of the CD1 nose in the last 166ms Median movement of the CD1 nose in the last 133ms Mean movement of the CD1 nose in the last 133ms Sum movement of the CD1 nose in the last 133ms Median movement of the CD1 nose in the last 66ms Mean movement of the CD1 nose in the last 66ms Sum movement of the CD1 nose in the last 66ms

Median movement of the C57 nose in the last 500ms Mean movement of the C57 nose in the last 500ms Sum movement of the C57 nose in the last 500ms Median movement of the C57 nose in the last 200ms Mean movement of the C57 nose in the last 200ms Sum movement of the C57 nose in the last 200ms Sum movement of the C57 nose in the last 200ms Median movement of the C57 nose in the last 166ms Mean movement of the C57 nose in the last 166ms Sum movement of the C57 nose in the last 166ms Median movement of the C57 nose in the last 133ms Mean movement of the C57 nose in the last 133ms Sum movement of the C57 nose in the last 133ms Median movement of the C57 nose in the last 66ms Mean movement of the C57 nose in the last 66ms Sum movement of the C57 nose in the last 66ms

Tail end movement - (tail base movement + centroid movement + nose movement) of CD1

Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 500m Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 200m Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 200m Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 166m Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 166m Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 133m Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 133m Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 133m Mean of CD1 tail end movement - (tail base movement + centroid movement + nose movement) in last 66m Mean of CD7 tail end movement - (tail base movement + centroid movement + nose movement) in last 66m Mean of CD7 tail end movement - (tail base movement + centroid movement + nose movement) in last 66ms The body angle in degrees (using the CD1 tail-base, centroid, and nose coordinates)

The body angle in degrees (using the C57 tail-base, centroid, and nose coordinates)

The summed angles of the two animals

The summed angles of the two animals in the last 500ms

The summed angles of the two animals in the last 200ms

The summed angles of the two animals in the last 166ms

The summed angles of the two animals in the last 133ms

The summed angles of the two animals in the last 66ms

The standard deviation of all bodypart movements from the mean

The standard deviation of the sum convex hull distances from the mean

The standard deviation of the shortest CD1 convex hull distance from the mean

The standard deviation of the longest CD1 convex hull distance from the mean

The standard deviation of the frame mean CD1 convex hull distance from the mean

The standard deviation of the CD1 and C57 centroid distance from the mean

The standard deviation of the sum CD1 and C57 body angles from the mean

The standard deviation of the CD1 centroid movement from the mean

The standard deviation of the C57 centroid movement from the mean

The standard deviation of CD1 convex hull area from the mean

The standard deviation of C57 convex hull area from the mean

The standard deviation of all bodypart movements from the mean in 500ms bins

The standard deviation of all bodypart movements from the mean in 200ms bins

The standard deviation of all bodypart movements from the mean in 166ms bins

The standard deviation of all bodypart movements from the mean in 133ms bins

The standard deviation of all bodypart movements from the mean in 66ms bins

The standard deviation of the sum convex hull distances from the sum in 500ms bins

The standard deviation of the sum convex hull distances from the sum in 200ms bins

The standard deviation of the sum convex hull distances from the sum in 166ms bins

The standard deviation of the sum convex hull distances from the sum in 133ms bins

The standard deviation of the sum convex hull distances from the sum in 66ms bins

The standard deviation of the mean of the shortest convex hull distances from the mean in 500ms bins. The standard deviation of the mean of the shortest convex hull distances from the mean in 166ms bins. The standard deviation of the mean of the shortest convex hull distances from the mean in 133ms bins. The standard deviation of the mean of the shortest convex hull distances from the mean in 66ms bins. The standard deviation of the mean of the longest convex hull distances from the mean in 500ms bins. The standard deviation of the mean of the longest convex hull distances from the mean in 200ms bins. The standard deviation of the mean of the longest convex hull distances from the mean in 166ms bins. The standard deviation of the mean of the longest convex hull distances from the mean in 166ms bins. The standard deviation of the mean of the longest convex hull distances from the mean in 166ms bins.

The standard deviation of the mean of the longest convex hull distances from the mean in 66ms bins.

The standard deviation of the mean convex hull distance from the mean in 500ms bins

The standard deviation of the mean convex hull distance from the mean in 200ms bins

The standard deviation of the mean convex hull distance from the mean in 166ms bins

The standard deviation of the mean convex hull distance from the mean in 133ms bins

The standard deviation of the mean convex hull distance from the mean in 66ms bins

Standard deviation of total movement of all body parts from the mean in 500ms bins

Standard deviation of total movement of all body parts from the mean in 200ms bins

Standard deviation of total movement of all body parts from the mean in 166ms bins

Standard deviation of total movement of all body parts from the mean in 133ms bins

Standard deviation of total movement of all body parts from the mean in 66ms bins

Standard deviation of CD1 and C57 centroid distances in 500ms bins

Standard deviation of CD1 and C57 centroid distances in 200ms bins

Standard deviation of CD1 and C57 centroid distances in 166ms bins

Standard deviation of CD1 and C57 centroid distances in 133ms bins

Standard deviation of CD1 and C57 centroid distances in 66ms bins

Standard deviation of the summed CD1 and C57 body angles in 500ms bins

Standard deviation of the summed CD1 and C57 body angles in 200ms bins

Standard deviation of the summed CD1 and C57 body angles in 166ms bins

Standard deviation of the summed CD1 and C57 body angles in 133ms bins

Standard deviation of the summed CD1 and C57 body angles in 66ms bins

Percentile rank of summed CD1 and C57 centroid movement

Percentile rank of summed CD1 and C57 summed body part distances

Percentile rank of CD1 centroid movement

Percentile rank of C57 centroid movement

Percentile rank of the CD1 standard deviation centroid movement

Percentile rank of the C57 standard deviation centroid movement

Percentile rank of summed CD1 and C57 standard deviation of centroid distance

Percentile rank of summed CD1 and C57 centroid distances

Percentile rank of all body part movements in 500ms bins

Percentile rank of all body part movements in 200ms bins

Percentile rank of all body part movements in 166ms bins

Percentile rank of all body part movements in 133ms bins

Percentile rank of all body part movements in 66ms bins

Standard deviation of sum of distances in CD1 and C57 convex hulls in 500ms bins

Standard deviation of sum of distances in CD1 and C57 convex hulls in 200ms bins

Standard deviation of sum of distances in CD1 and C57 convex hulls in 166ms bins

Standard deviation of sum of distances in CD1 and C57 convex hulls in 133ms bins

Standard deviation of sum of distances in CD1 and C57 convex hulls in 66ms bins

Percentile rank of the mean CD1 distance in convex hull in 500ms bins

Percentile rank of the mean CD1 distance in convex hull in 200ms bins

Percentile rank of the mean CD1 distance in convex hull in 166ms bins

Percentile rank of the mean CD1 distance in convex hull in 133ms bins

Percentile rank of the mean CD1 distance in convex hull in 66ms bins

Percentile rank of the shortest CD1 distance in convex hull in 500ms bins

Percentile rank of the shortest CD1 distance in convex hull in 200ms bins

Percentile rank of the shortest CD1 distance in convex hull in 166ms bins

Percentile rank of the shortest CD1 distance in convex hull in 133ms bins

Percentile rank of the shortest CD1 distance in convex hull in 66ms bins

Percentile rank of the longest CD1 distance in convex hull in 500ms bins

Percentile rank of the longest CD1 distance in convex hull in 200ms bins

Percentile rank of the longest CD1 distance in convex hull in 166ms bins

Percentile rank of the longest CD1 distance in convex hull in 133ms bins

Percentile rank of the longest CD1 distance in convex hull in 66ms bins

Percentile rank of summed centroid body part movements in 500ms bins

Percentile rank of summed centroid body part movements in 200ms bins

Percentile rank of summed centroid body part movements in 166ms bins

Percentile rank of summed centroid body part movements in 133ms bins

Percentile rank of summed centroid body part movements in 66ms bins

Percentile rank of CD1 and C57 centroid distance in 500ms bins

Percentile rank of CD1 and C57 centroid distance in 200ms bins

Percentile rank of CD1 and C57 centroid distance in 166ms bins

Percentile rank of CD1 and C57 centroid distance in 133ms bins

Percentile rank of CD1 and C57 centroid distance in 66ms bins

Tortuosity of CD1 trajectory in last 500ms

Tortuosity of CD1 trajectory in last 200ms

Tortuosity of CD1 trajectory in last 166ms

Tortuosity of CD1 trajectory in last 133ms

Tortuosity of CD1 trajectory in last 66ms

The sum of DLC probability for all tracked body parts in frame

Standard deviation of sum of DLC probabilities for all tracked body-parts

The percentile rank of deviation of DLC probabilities for all tracked body-parts

The percentile rank of DLC probabilities for all tracked body-parts

Number of DLC probabilities lower than 0.1

Number of DLC probabilities lower than 0.5

Number of DLC probabilities lower than 0.75

ns

ıs

ns

ıs ns

ıs

ns

ıs

s