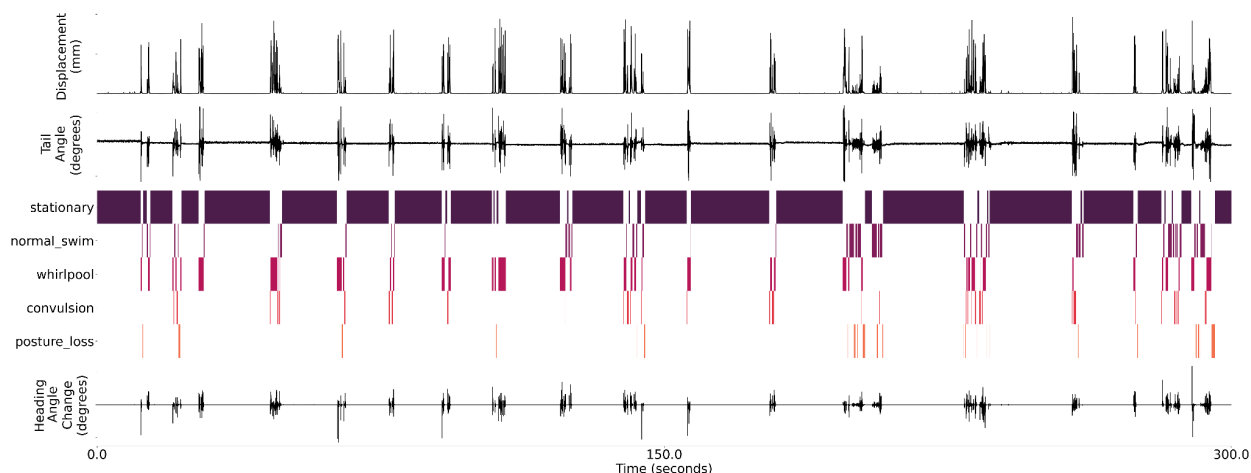


Animal Behavior Analysis

Animal behavior analysis is an analysis protocol that can be implemented after animals have been tracked using the Kestrel's tracking feature. Currently available behavior prediction models include 96-well seizure behavior and 96- and 24-well swim behavior in zebrafish. Results are visualized as an individual ethogram for each animal and an overall behavior summary for the well plate as well as saved to a csv output.



Ethogram of predicted zebrafish seizure behaviors.

Step	Function
1	Open a previously tracked dataset in the MCAM Viewer software.
2	Go to Assays > Animal Behavior. A panel will open on the right.
3	Select an animal behavior model for analysis. Available models include seizure and swim behaviors
4	Click "Analyze Behavior" to run the analysis.
5	Analysis results are saved in a folder named "behavior_analysis_results" in the parent folder of the analyzed dataset. An ethogram and kinematic metrics are visualized for each individual animal and a behavior summary is generated for the entire well plate. Tabular data is saved in a csv file named "behavior_results.csv".