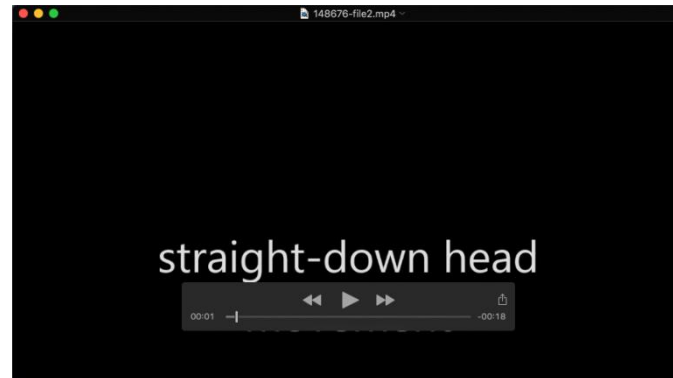
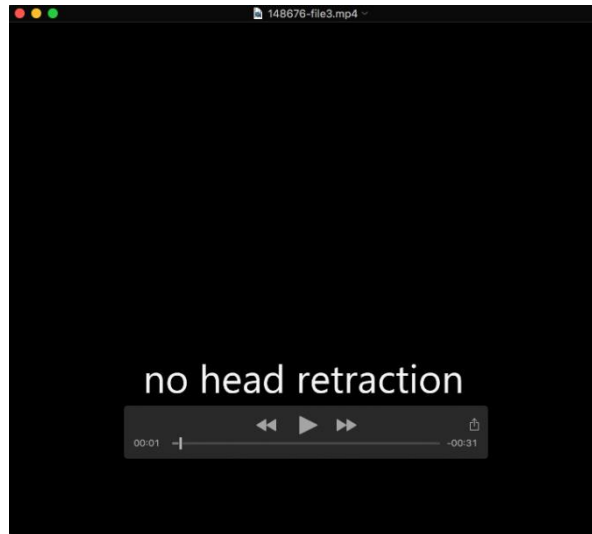


**Movie 1:** Typical trial viewed from the top camera. A harbour seal stations in the hoop station on the left and is equipped with an eye mask. On a start signal it starts to search for the active nozzle and stations there for 5 s. The seal is then called back to the trainer to receive a food reward.



**Movie 2:** Examples of the three different head movements which were classified. First clip: straight down movement. A harbour seal approaches the active nozzle from the left, the breathing current is directed against its swimming direction, to the left (note the orientation of the nozzle below the mesh-grid). The seal moves straight toward the nozzle. Second clip: U-turn. A harbour seal approaches the active nozzle from the left, the breathing current is directed to the right. The seal passes the nozzle, then turns around. Third clip: correction. The harbour seal performs a U-turn, but suboptimally, and corrects its position to station at the nozzle.



**Movie 3:** Examples of trials with and without head retraction in seal Filou. Clip1: a trial where the seal is blindfolded. No distinctive head movements at the nozzles (in the centers of the red circles) are performed until the seal finds the active nozzle (no. 8, upper left). Clip 2: a trial where the seal is not blindfolded. At the nozzles in the centers of the red circles, the seal briefly retracts its head to reduce the forward speed of the vibrissal array, while swimming speed is maintained.