



Movie S1. Simultaneous recordings of intestinal movements and EEA in an individual SW-acclimated rainbow trout reveal that MMCs are coincident with EEA clusters. The video-recording of the section of proximal intestine that surrounds the implanted pair of electrodes in an anaesthetised SW-acclimated rainbow trout demonstrates the rhythmic occurrence of MMCs (top panel). By determining the changes in translucency and reflectivity along the surface of this section of proximal intestine during the recording period, a spatio-temporal map can be generated to allow the visual identification of MMCs, as well as the spatial and temporal characteristics of this motility pattern (middle panel). Recordings of EEA reveal that the bursts of contractions during the MMC observed in the video-recordings are coincident with EEA clusters (bottom panel). This information allows better interpretation of EEA recordings, and therefore gastrointestinal motility, in conscious individuals during real time responses to environmental or physiological challenges.