

EOD*f* base-  
line sampled  
at ~3 Hz

**Raw** wave-  
form sampled  
at 20 kHz

**Powers** of  
EOD*f*, sampled  
at ~3 Hz

Feature extraction on  $n$  electrodes

Bandpass  
filter around  
baseline

Bandpass  
filter above  
baseline

Baseline  
instantaneous  
frequency

Feature transformation and scaling

Peak  
detection

Peak  
classification

Chirp time-  
stamps per  
fish