

**Movie 1. Non-mating interaction between primary and secondary squid.** Two secondary squid interacting with one another. As primary squid approaches, both secondary squid turn to face primary squid while opening their arms widely before jetting away.



**Movie 2. Flashing.** Primary and secondary squid demonstrate the dynamic chromatophore display 'flashing' in which the entire body rapidly alternates between red (dark) and white (pale).



**Movie 3. Flickering.** Primary squid demonstrates the dynamic chromatophore display 'flickering' in which the irregular chromatophore activity produces irregular dark waves across the skin.



**Movie 4. Down-welled natural sunlight on squid.** The appearance of down-welled natural sunlight on the squid's skin generates wave that resemble those during the flickering display. It is possible that the Humboldt squid use flickering to mimic the appearance of down-welled light to provide a form of dynamic crypsis.