

2.7.1. SCREEN: Terminal window showing the commands being typed: cd PiSpy, python3 PiSpy.py. ("PISPY RECORDING" 0:04 - 0:36)

2.7.2. SCREEN: PiSpy interface where the user inputs the recording length, frame rate, and resolution. ("PISPY RECORDING" 0:36 - 0:47)

2.7.3. SCREEN: User clicking on the Quick Capture button. ("PISPY RECORDING" 0:58-1:30)

2.8. Now, use the Preview Camera function in PiSpy to ensure the flies are in focus and sufficiently visible [1]. Record the flies for 10 minutes at a recommended frame rate of 24 frames per second and save the file [2]. ("PISPY RECORDING" 0:47 - 0:58)

2.8.1. SCREEN: PiSpy software displaying the Preview Camera view with all flies clearly visible and in focus. ("SAMPLE VIDEO" 0:00 - 0:06)

2.8.2. SCREEN: The flies are being recorded and the file is being saved ("PISPY RECORDING" 11:16 - 12:10)

2.9.1. SCREEN: Elan 6.8 interface with the video file being imported for analysis. ("ELAN RECORDING" 0:03 - 0:14)

2.10.1. SCREEN: Elan software menu showing the selection of Tier > Add New Tier. Tier Name field where "Location in the dish" is typed and add is being clicked ("ELAN RECORDING" 0:29 - 1:11)

2.11.1. SCREEN: Elan interface showing the cursor being dragged along a tier to annotate a grooming bout. ("ELAN RECORDING" 1:36-1:49)

2.11.2. SCREEN: New Annotation option selected, and a time period highlighted. User typing the behavior abbreviation into the annotation field. ("ELAN RECORDING" 1:54-1:49)

2.12.1. SCREEN: Elan interface with the video being scrubbed through slowly, zoomed into a single fly well. ("ELAN RECORDING" 1:36-1:49) – *same thing, annotation of a whole tier takes roughly 30-45 minutes, likely not conducive to this video format*

2.13.1. SCREEN: Elan 6.8 summary panel displaying the breakdown of behaviors TXT: Use consistent abbreviations/annotations throughout the videos ("ELAN RECORDING" 2:07-2:34)

body [3].

2.14.1. SCREEN: Elan interface showing a grooming bout highlighted. ("ELAN RECORDING" 1:36-1:49)

2.14.2. SCREEN: Close-up view of the fly exhibiting anterior grooming, focusing on the head and forelimbs. ("ANTERIOR GROOMING BOUT", 0:01-0:17)

2.14.3. SCREEN: Close-up view of the fly exhibiting posterior grooming, focusing on movements near the posterior region. ("POSTERIOR GROOMING BOUT", 0:02-0:09)