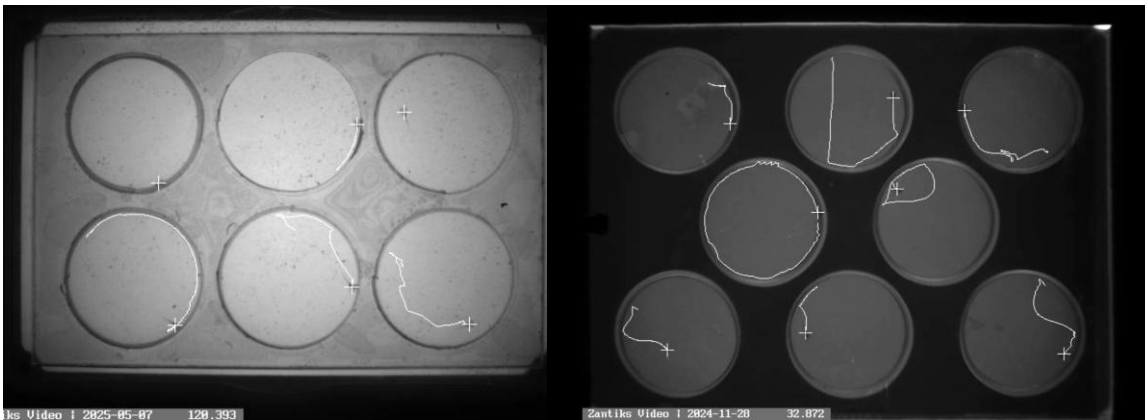


Tadpole Locomotion Video Analyser

Simple script for post-analysing *Xenopus* tadpole locomotion videos (with crosshairs, see below) that have been recorded without producing XY data. This a python script that thresholds and overlays each frame of locomotion videos to produce a trail using the position of the target in the video.



1. Getting an IDE

Download vscode for Windows <https://code.visualstudio.com/Download> - select the option to put on your PATH in the installation

Restart your PC and open vscode

View>Terminal

2. Downloading code from git and opening in IDE workspace

Navigate to where you want to put the script using cd (change directory) e.g.

```
cd desktop
```

```
git clone https://github.com/vorso/tadpole-early-locomotion-video-analyser
```

```
cd tadpole-early-locomotion-video-analyser
```

Open the current location of the terminal in vscode as a workspace

```
code .
```

3. Preparing the environment

Go to your computer Desktop or wherever you saved the script. Copy the video files to be analysed into the **tadpole-early-locomotion-video-analyser** folder that has appeared there.

4. Installing prerequisites

```
python
```

If you don't have it, it will take you to the Windows Store to install Python 3.13. Hit "Get" and wait for it to install. Type python again to verify it has installed, this should open a python shell (with >>>, indicating you are no longer using bash)

```
python
```

Then exit python

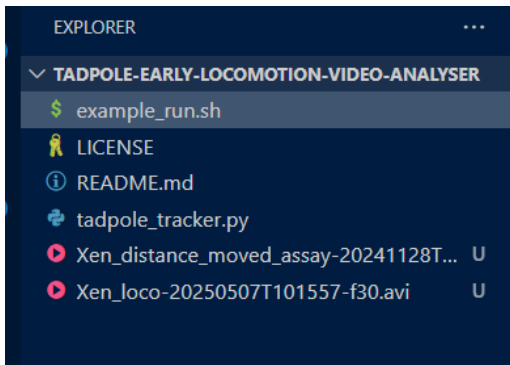
```
exit()
```

Install python package prerequisites

```
pip
```

```
pip install opencv-python
```

Click on script in Explorer to open it



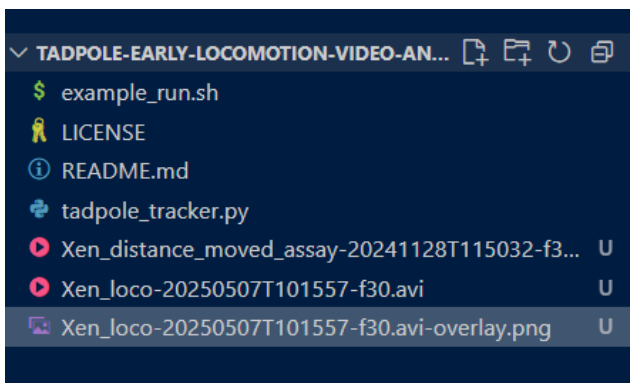
5. Running the script

Paste the name of video you want into the script here, and then paste the whole line into the terminal to run

```
6 #Run Tracker
7 python3 tadpole_tracker.py --input Xen_loco-20250507T101557-f30.avi;
8
```

```
python3 tadpole_tracker.py --input Xen_loco-20250507T101557-f30.avi;
```

Output will appear here...



And look something like this!

