

Excitation Editor

The Excitation Editor allows you to visually inspect and edit muscle excitation patterns. This can be useful when specifying the input for a forward dynamic simulation ([Forward Dynamics](#)) or when examining the outputs of a control algorithm that solves for muscle excitations, for example, the Computed Muscle Control ([Computed Muscle Control](#)). In cases where excitations are solved for, the Excitation Editor can also be used to provide an initial guess of the solution.

Although the tool is called the Excitation Editor, it can be used to view and edit any controls waveform described using the OpenSim settings (.xml) file format. For example, reserve actuators calculated during a Computed Muscle Control run are written to a controls file along with muscle excitations and can also be viewed and edited using the Excitation Editor tool. The topics covered in this chapter are:

- [Opening and Restoring Excitation Editor](#)
- [Excitation Tree and Excitation Grid Panel](#)
- [Excitation Editor Control Panel](#)

Excitation Editor Quick Guide

Adjusting the Plot Window

- **Zoom in** on a region of the plot by selecting an area of interest with the mouse. Anchor/click with left mouse button and drag to lower right to Zoom In on a rectangle.
- Anchor/click with left mouse button and drag to the left to **Zoom Out/Refit** the data.
- Use **I** to zoom in about the center of the panel.
- Use **O** to zoom out about the center of the panel.
- Use **L** to move the panel Left
- Use **R** to move the panel Right
- Use **U** to move the panel Up
- Use **D** to move the panel Down

Same functionality is available on Windows and Mac OS.

Selection

- Holding the **CTRL** button down turns on selection mode. (use **CTRL + option** on Mac)
- Left mouse click selects individual points.
- Shift + left mouse click accumulates selection.
- Draw a box to select all points within the box.
- Left mouse button in background deselects all points.

Adding Points

- Right mouse click inside a panel and use the popup menu to add points.

Next: [Opening and Restoring Excitation Editor](#)