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APPLICATION NOTE

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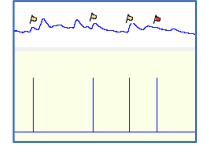info@biopac.com | **www.biopac.com**

11/15/18

## Application Note 288   How to Turn Events into Graph Channels

This application note explains how Acq*Knowledge* 5 features can be used to plot event markers in a graph channel, where spikes indicate where events are located. This process can be useful for exporting data or to save from Acq*Knowledge* 5 to an earlier version without losing event data.

1. Ensure that the events desired are placed on the graph, on the desired channel. The events can be placed on a waveform or in the Global channel that sits above the graph. In this example, we are using the default flag, on Channel 1, as the event mark that we will turn into a channel:
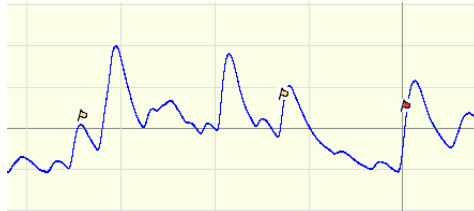

- Make sure you know what type of event you're using. You can verify the type by right-clicking on the event and selecting "Edit Event." This will bring up the event palette, where the event you selected will be highlighted. Our type is listed as **Flag**:
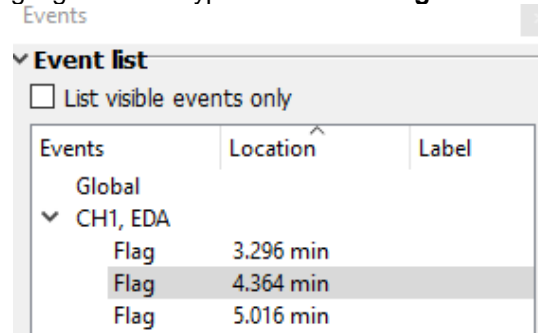

2. Set one measurement box to channel **SC** (selected channel) and type **Evt_count**.
    a. Click on the drop-down menu next to where the measurement type is displayed, as circled here, to select this option.
   b. When prompted, select the desired event type under Event Type.
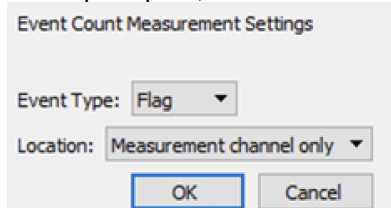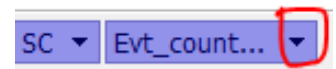
- Event labels are grouped under categories for the type of information conveyed by the measurement; for instance, QRS complex events are under ECG Complexes, under Hemodynamics. **Flag** is under the "Notes" menu.
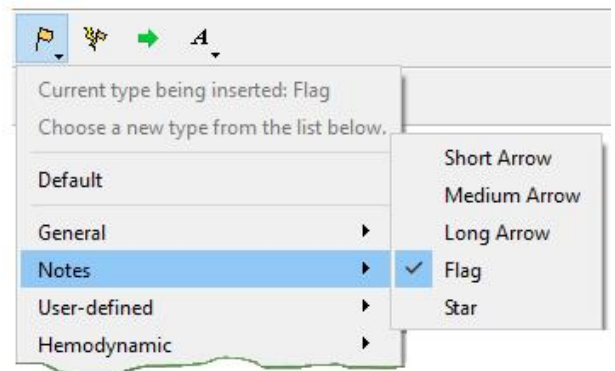
    c. Ensure that the Location is set to where the events are actually located. "Measurement channel only" will select events that are located on the currently selected waveform. Ensure that the graph channel containing the measurements is currently selected before proceeding to the next step.
    d. Set all other measurement boxes to "None…"
    e. Save as Preset (optional): This measurement setting can be saved as a preset, which can be later easily switched to, if other measurements are needed at other points of the analysis. To save as preset, select the large black down arrow to the left of all of the measurement boxes.

3. Select "**Find Cycle…**" under the Analysis menu; the **Cycles/Peaks** tab should be active. Choose the following settings, replacing the event type with the desired event type, and the location setting with the currently selected channel. Be sure to deselect (uncheck) "Match pairs of events only":
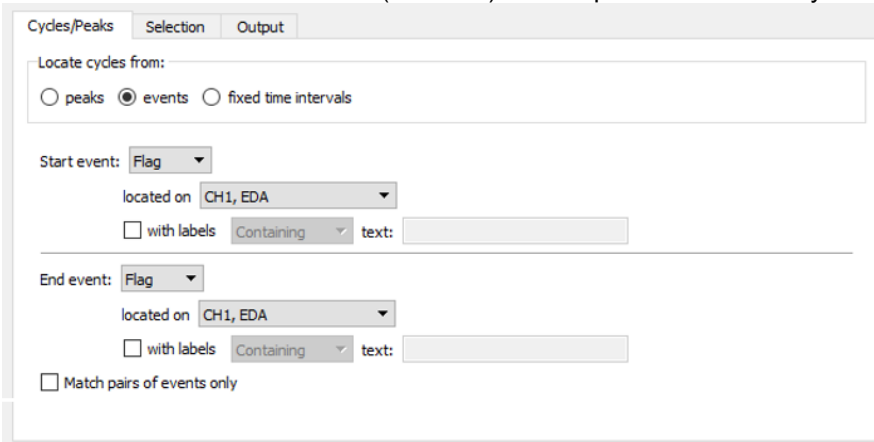
4. Click the **Selection** tab and enter Time of: <u>Left edge</u> Starting event+0, <u>Right edge</u> Starting event+0:
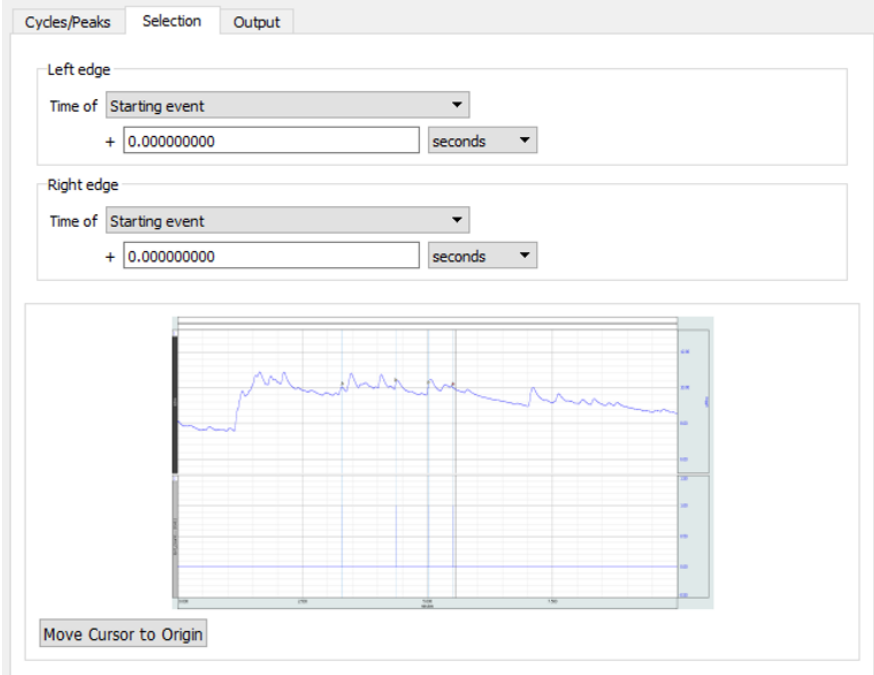
5. Click the **Output** tab and enable (check) "Display measurement values as channels in graph."
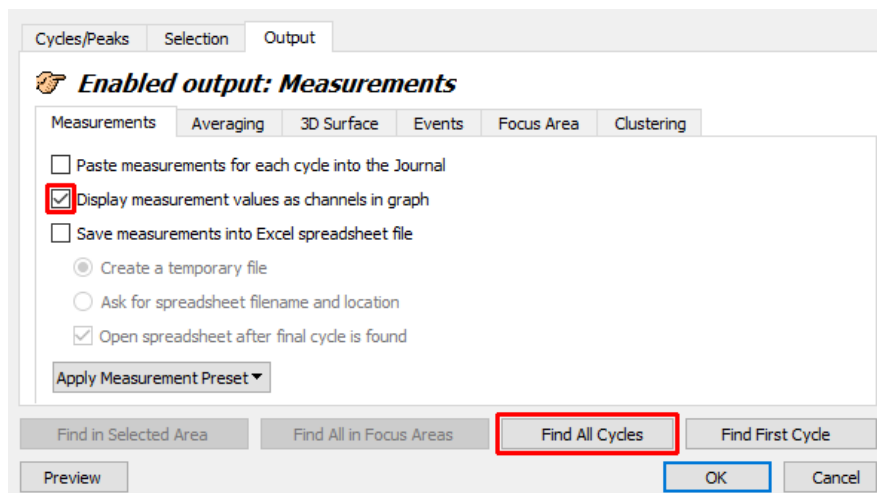
6. Click "**Find All Cycles**." If prompted, move the cursor to origin. This should create a graph channel where there are spikes only where the events are located.