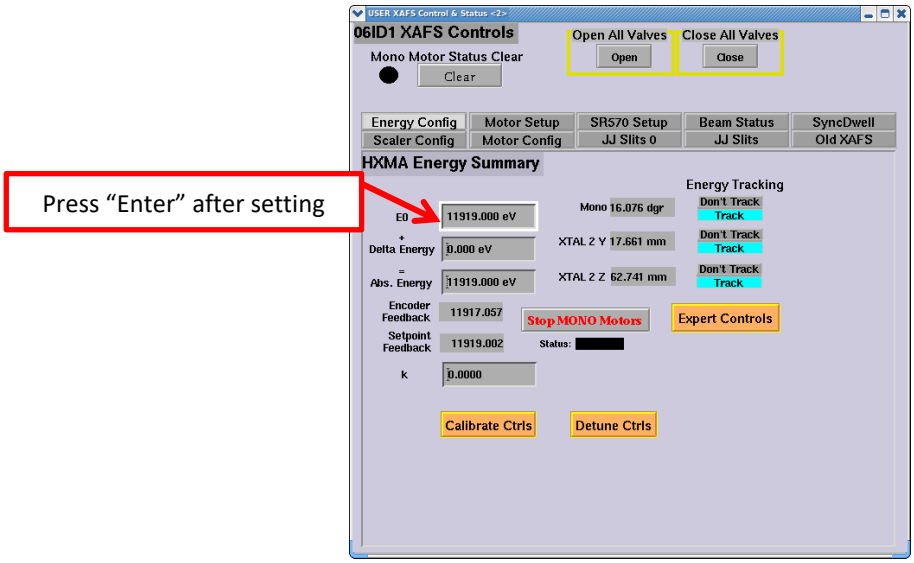
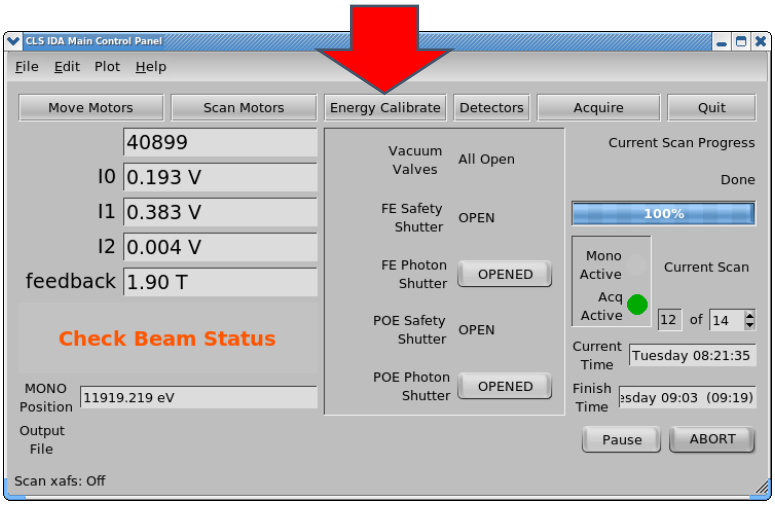
HXMA Mono Energy Calibrate

1. Set the mono to the desired energy by setting “E0” to the targeted edge energy (in eV), and hit enter.
   Note: *if the current E0 is far away from target E0, change E0 gradually. For example, target E0 is 11919 eV, current E0 is 7112 eV, change E0: 1) 8000 eV (hit enter); 2) 9000 eV (hit enter); 3) 10000 eV (hit enter) 4) 11919 eV.*

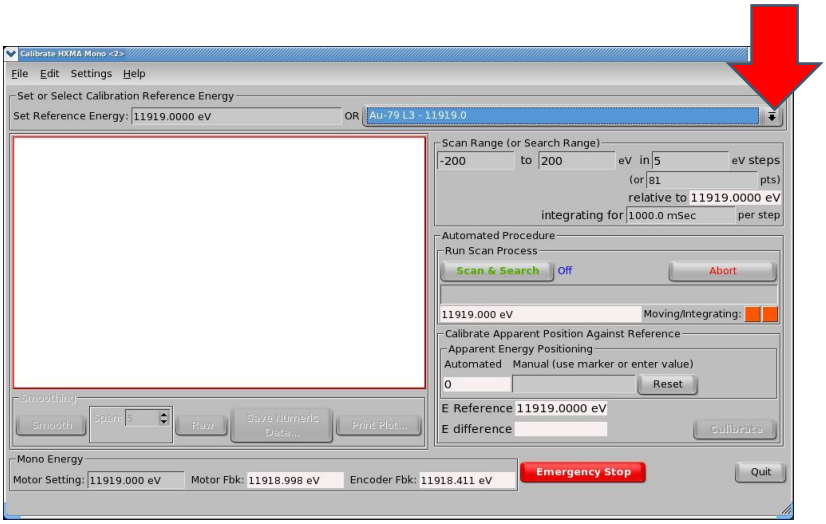
2. Wait until all the motors stop to finish the process. This can take at most a few minutes if the change is significant.



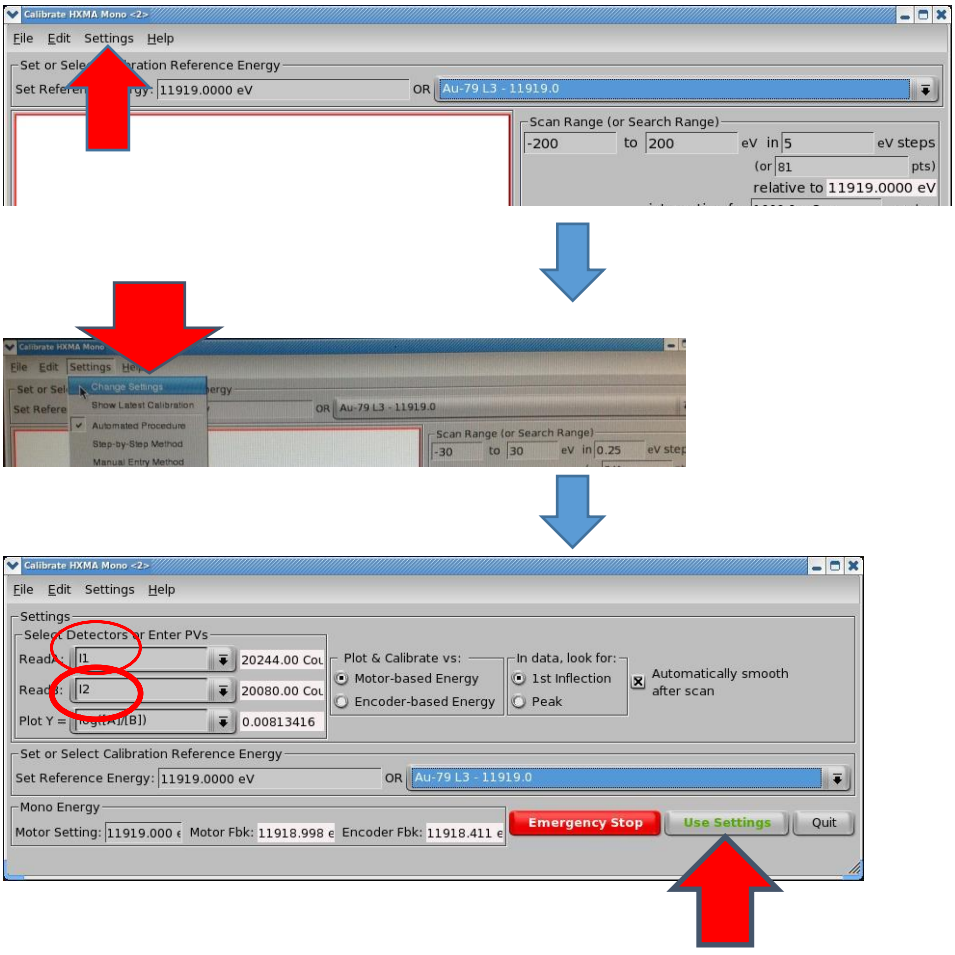
3. Select “Energy Calibrate” from IDA software



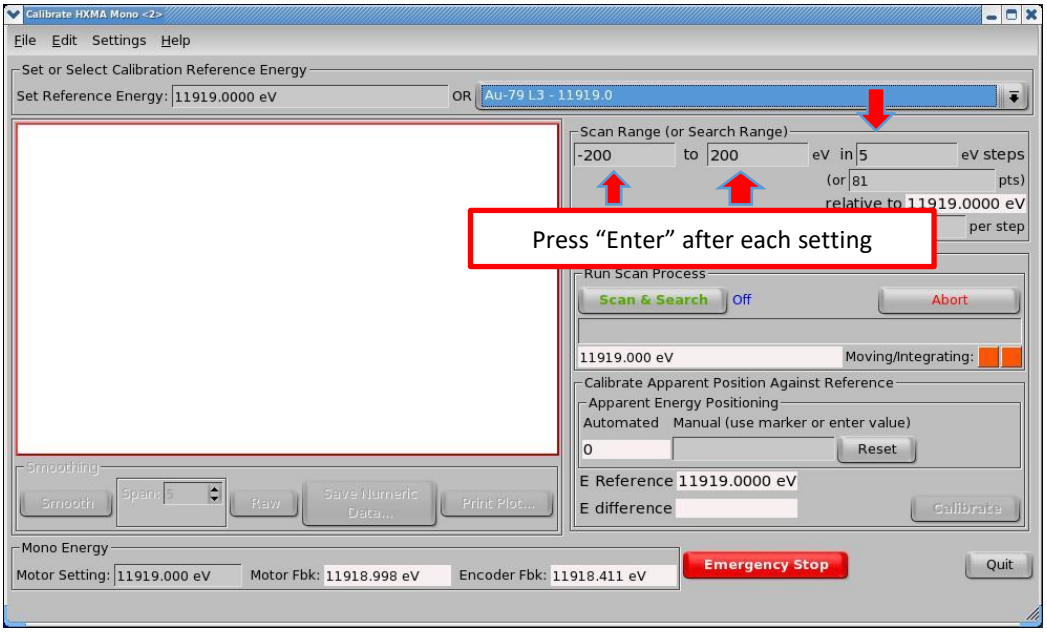
4. Select the desired element and corresponding edge by pointing the arrow of the mouse



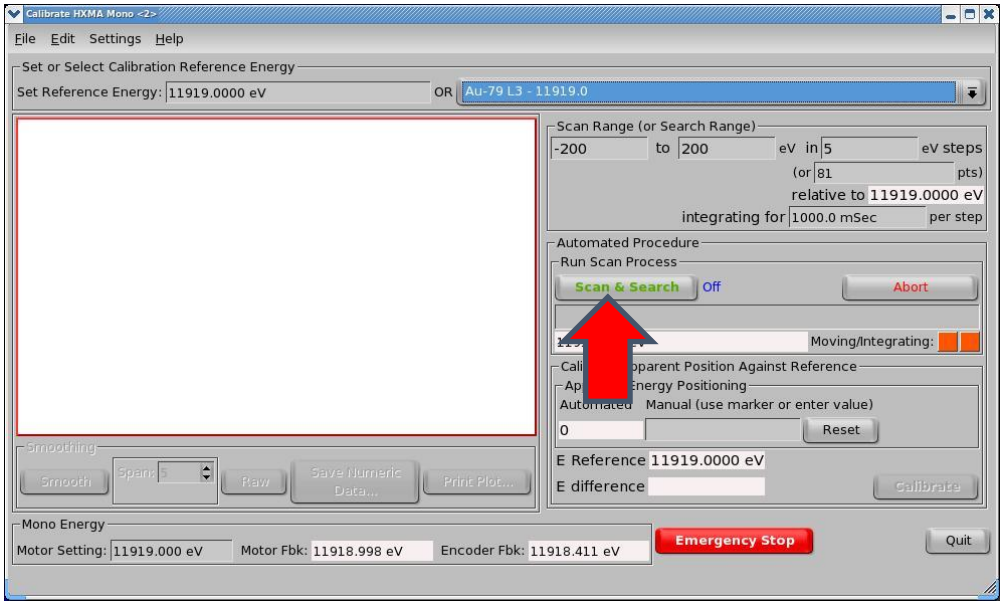
5. Metal foil is usually positioned between I_1 and I_2. If not, reset detectors accordingly through “Settings”- “Change setting”



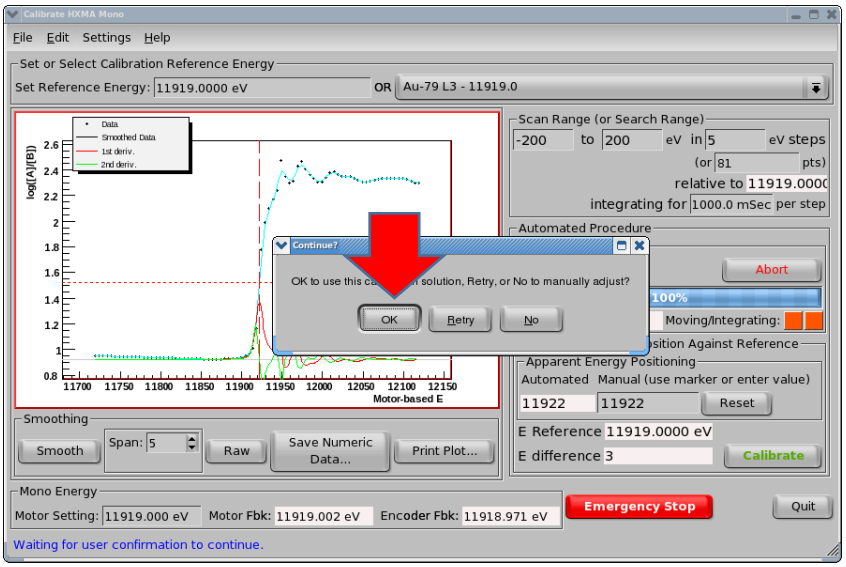
6. In case there is large uncertainty in mono energy, calibration configuration can be reset through “Use settings”. Main menu will come out, e.g., (-200, 200, 5). If not, skip the step 6, 7 and 8.



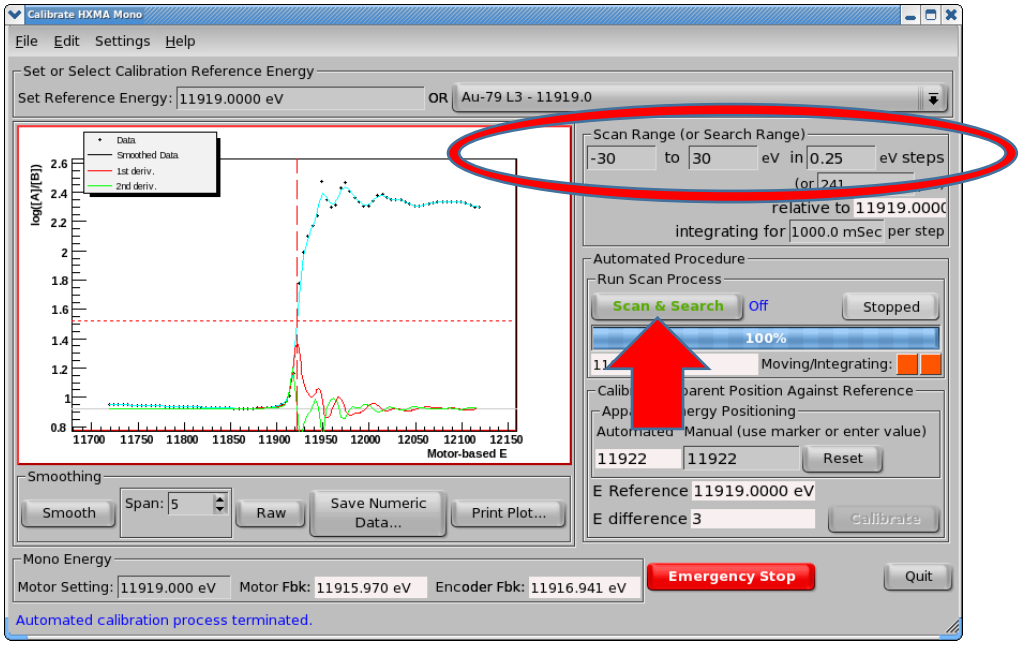
7. Click “Scan & Search”



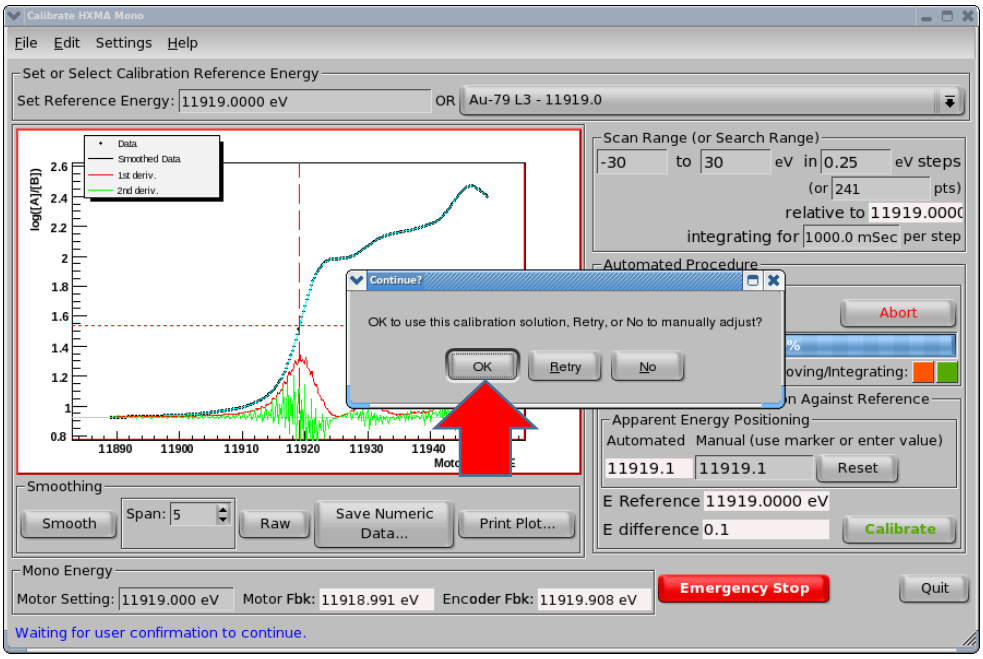
8. If accepting the solution resolved by the calibration software, select “OK”



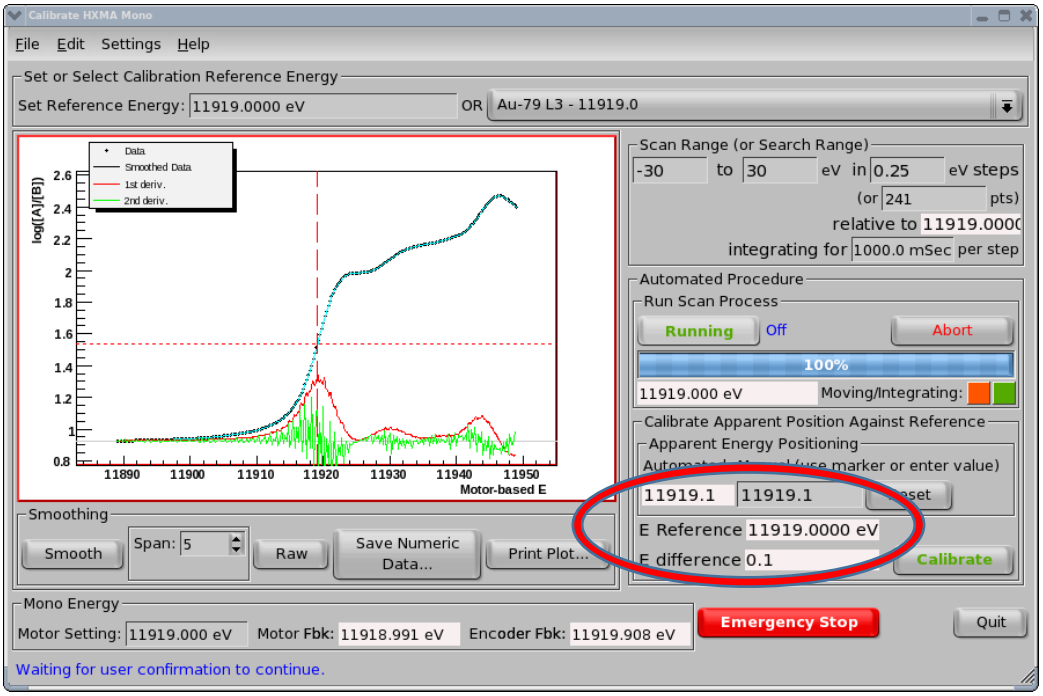
9. Energy calibration using the default configuration (-30, 30, 0.25), click “ Scan & Search”



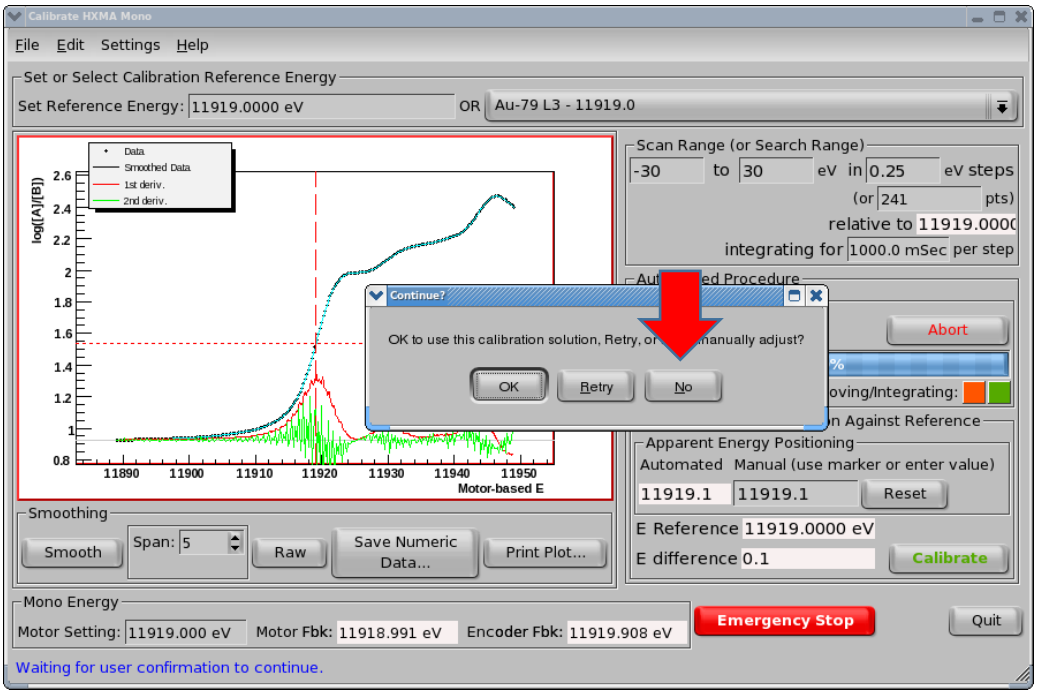
10. Then you can get this figure, click “OK” if you accept the position



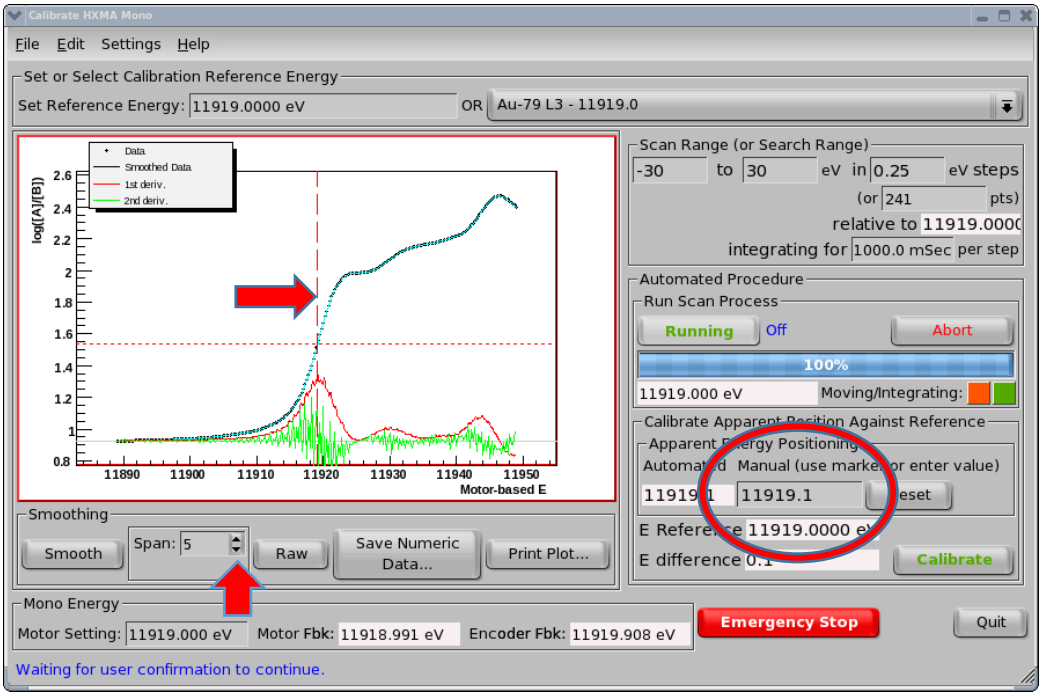
11. Then energy calibrate is done.



12.If you do not accept the software solution, select “no”



13. Progressively changing the data points used for smoothing the graph using the up and down arrows at the “Span” button, and monitor whether the E_0 indicated by the first derivative of the collected XANES spectrum (red) is changed, moving the vertical bar to the resolved E0 position if necessary.



14.If changing is little or ignorable, select “calibrate energy”