

\*Here I have my work-loop with fixed calcium. TmpC= 23, kxb=1, KSE=1, afterload= 0.4, F\_total= active+ passive. (This is what I got when trying to replicate Kenneth’s MATLAB work-loops)



Here Tmp-30, kxb=1, KSE=1, afterload= 0.4. Fixed calcium. The model goes a bit nuts, cannot seem to handle Tmp=30 for some reason. It appears that fixed calcium does not help with the non-flat isotonic shortening phase problem! I will try a higher afterload to see if that makes a difference.



Tmp-30, kxb=1, KSE=1, afterload= 0.5. Fixed calcium. Higher afterload does not seem to make a difference.



Tmp=30, kxb=1, KSE=1, afterload=0.4, mass= 5 (instead of 50). there is still some very odd behaviour. It looks as though the model is less capable of handling higher temperatures (30) with the fixed calcium transient.



It turns out the Hinch model is not set to represent an environment of 30C like I thought! instead, the Tmp is 295K or 21.85C. This means that I do not have to worry about getting my work-loop model to function at 30C! hooray! In the figure above, Tmp=23, kxb=1 (I figures out that F\_total should be active+passive), and afterloads are 0.15, 0.2, 0.3, 0.4, 0.5,0.6.











