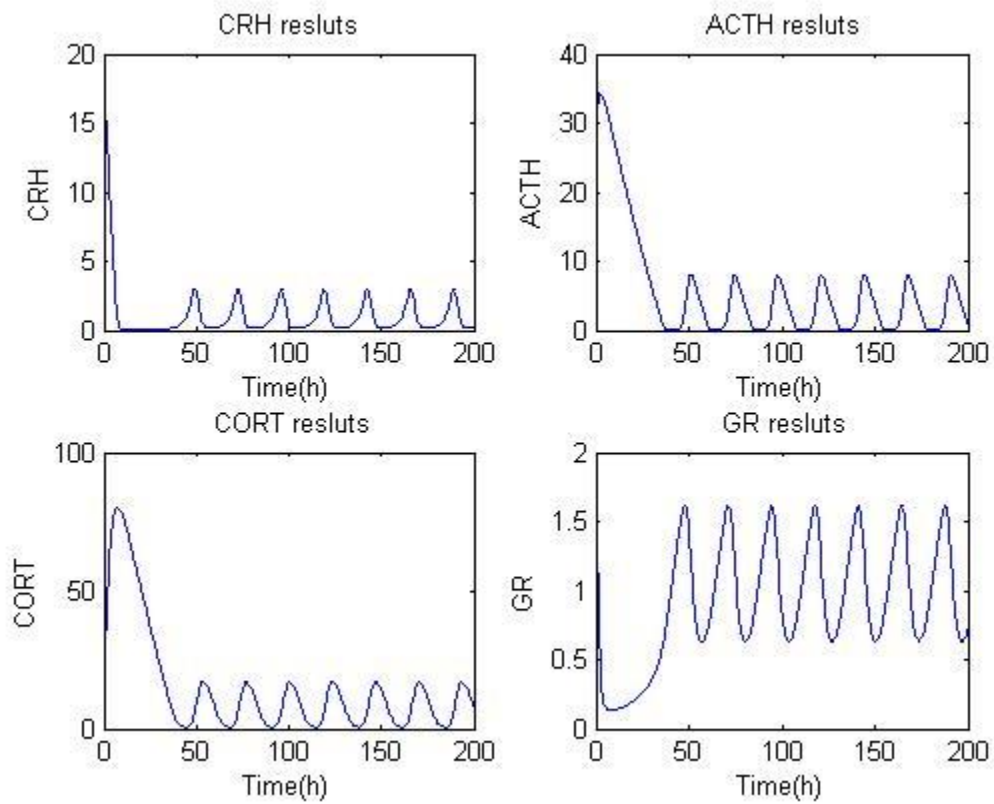
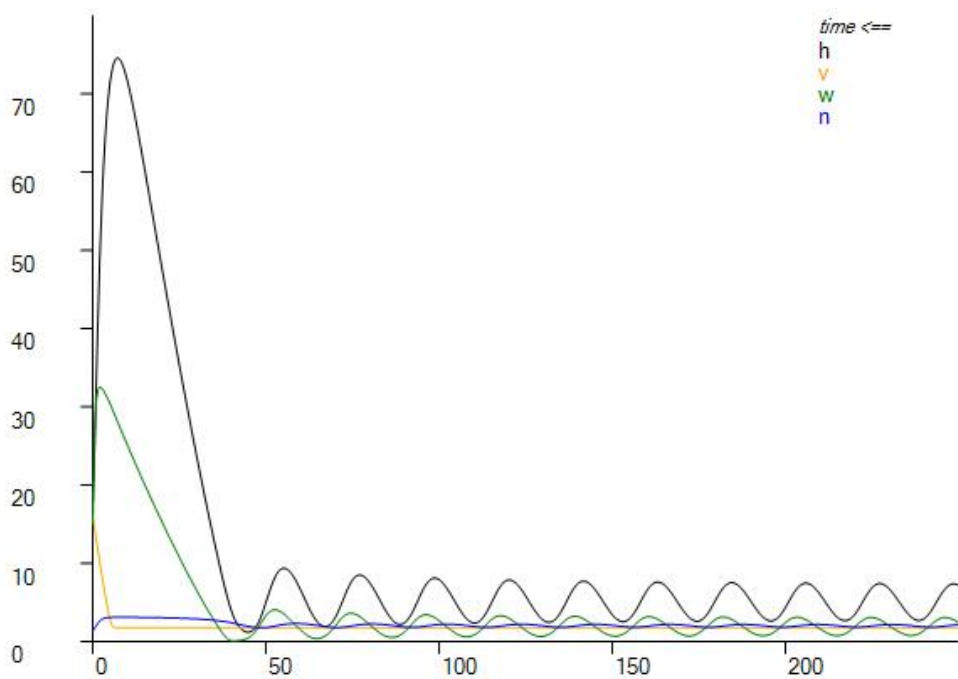


## PTSD Case:

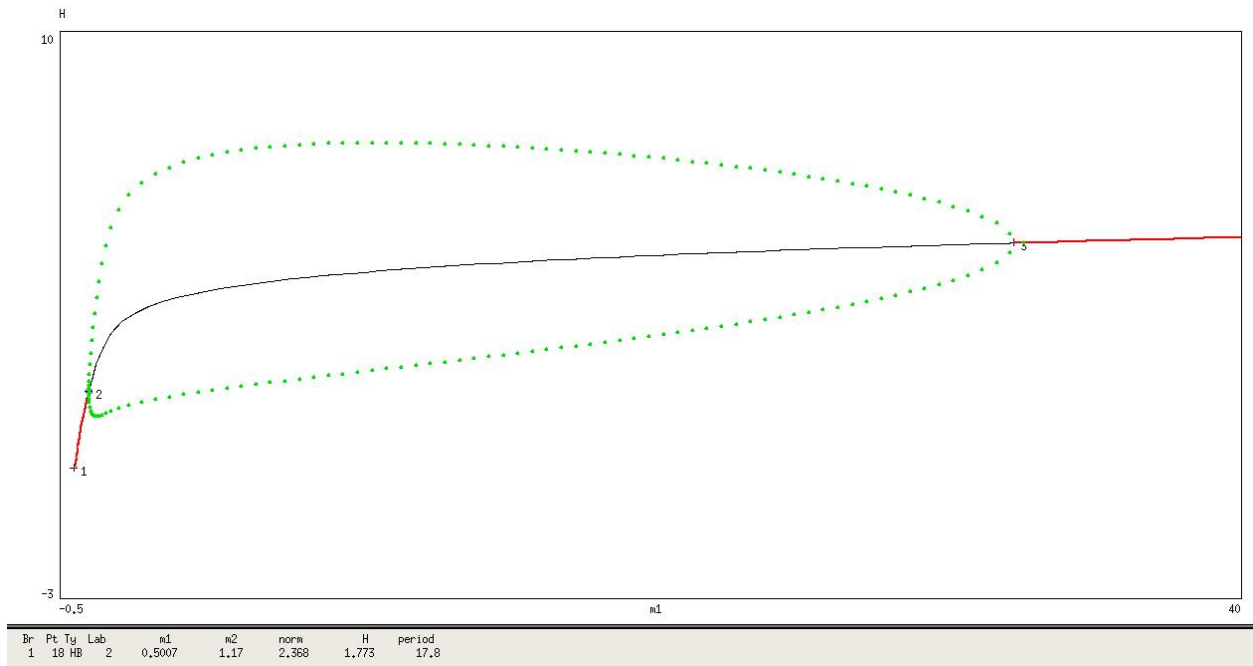


Graph from Oscill8:

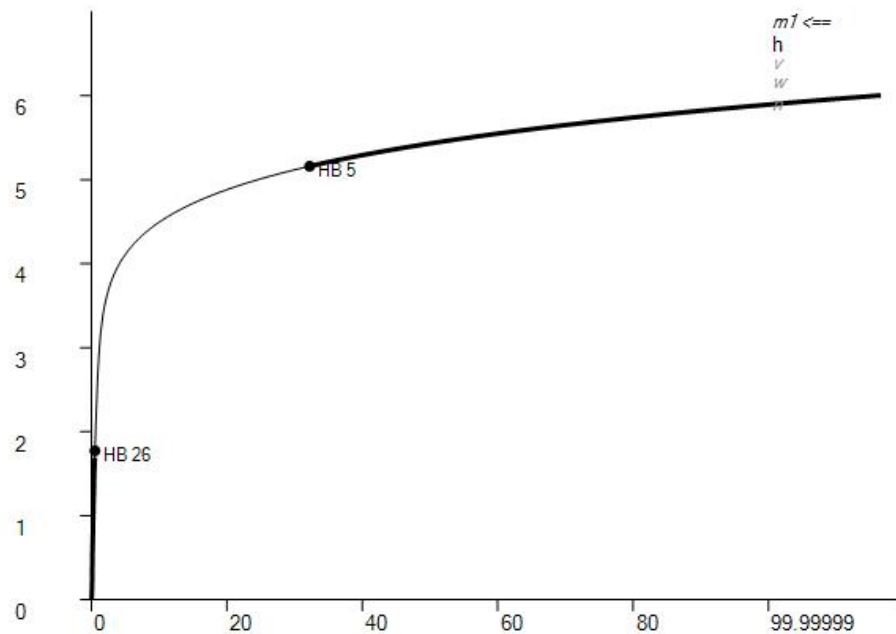


Same for the CORT and ACTH, but for CRH, the xppaut lost it's period.

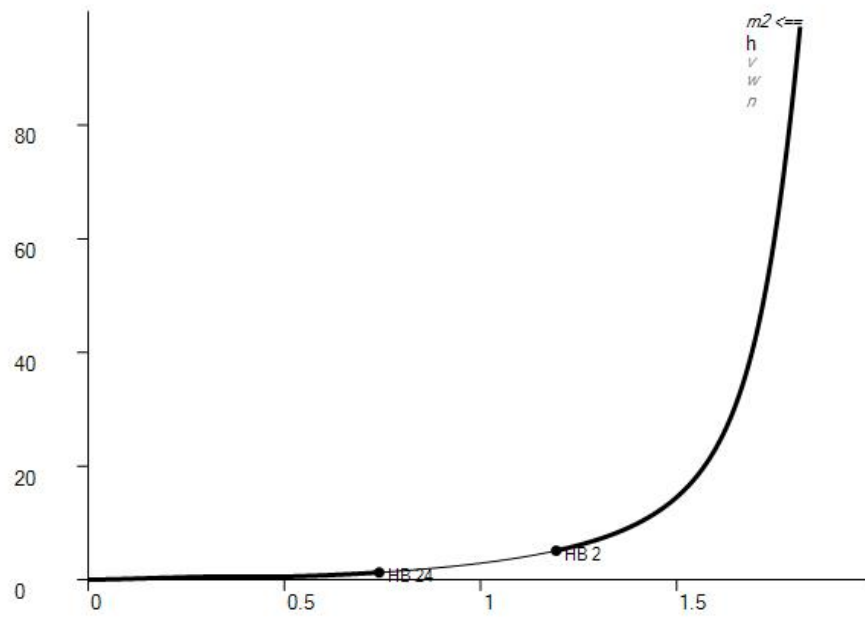
k-stress:



The starting point(0.5007) is same with the paper provided but the end one(32.22) is different with the paper provided(234).

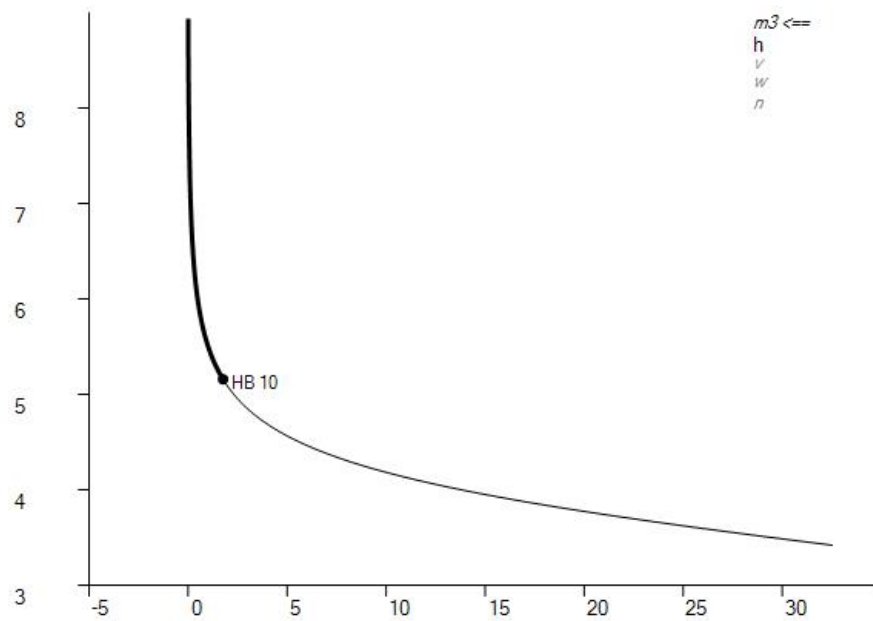


K-i:

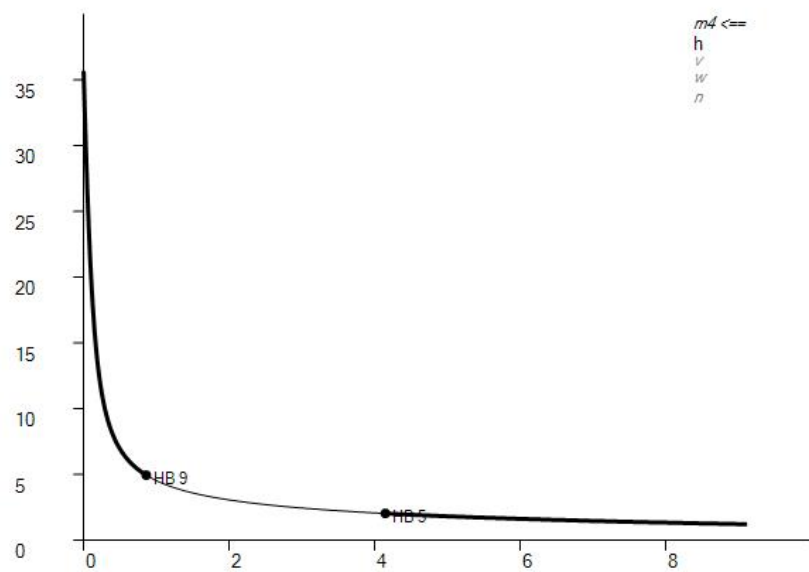


HB24: 0.74 HB2:1.19

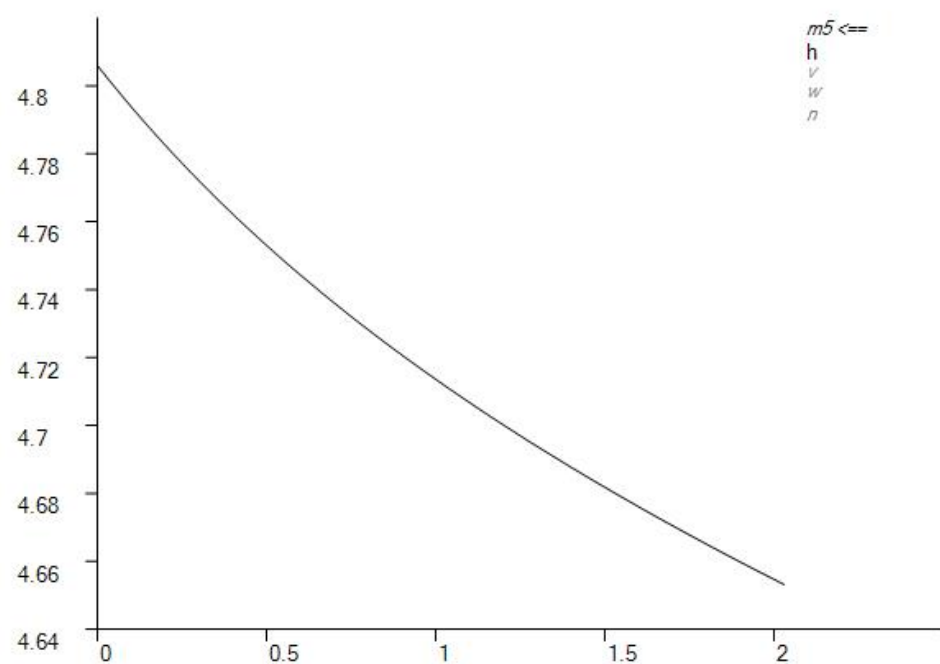
Vs3(rates of CRH degrades through saturation kinetics):



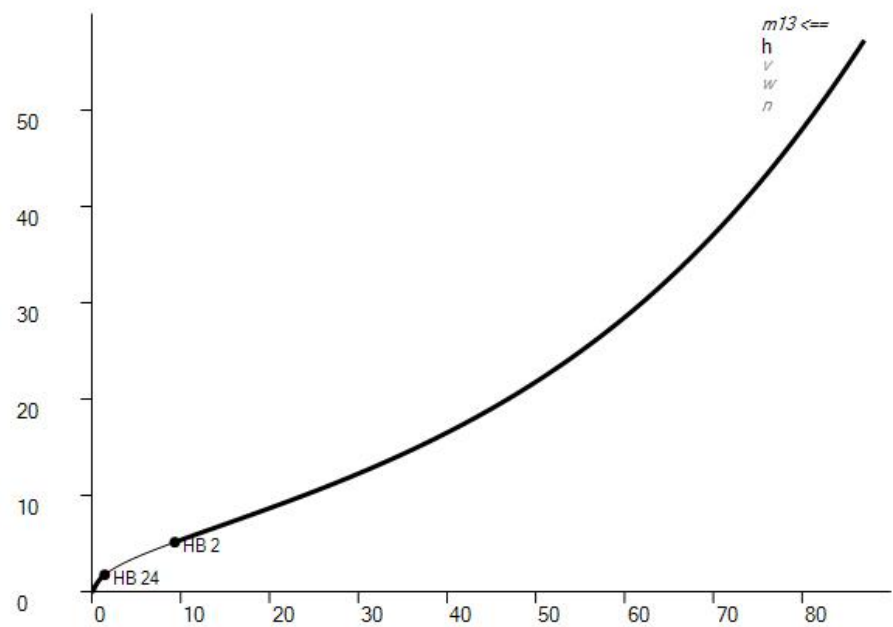
Vs4( rates of ACTH degrades through saturation kinetics):



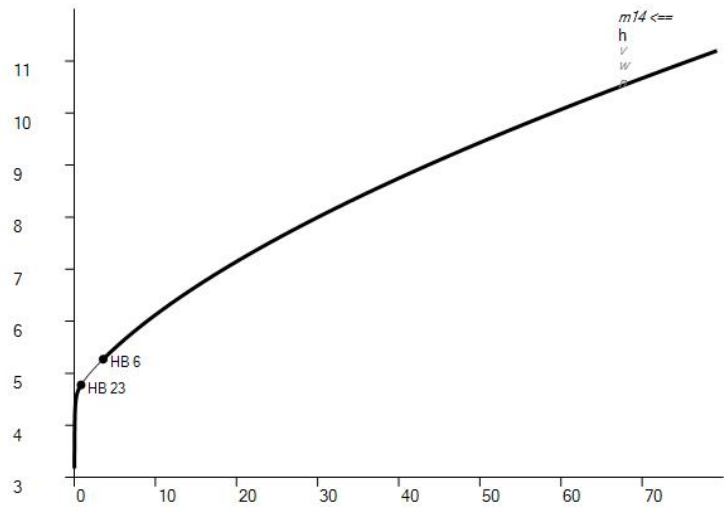
Vs5(rates of CORT degrades through saturation kinetics):



Kp2(rates of CRH production ):

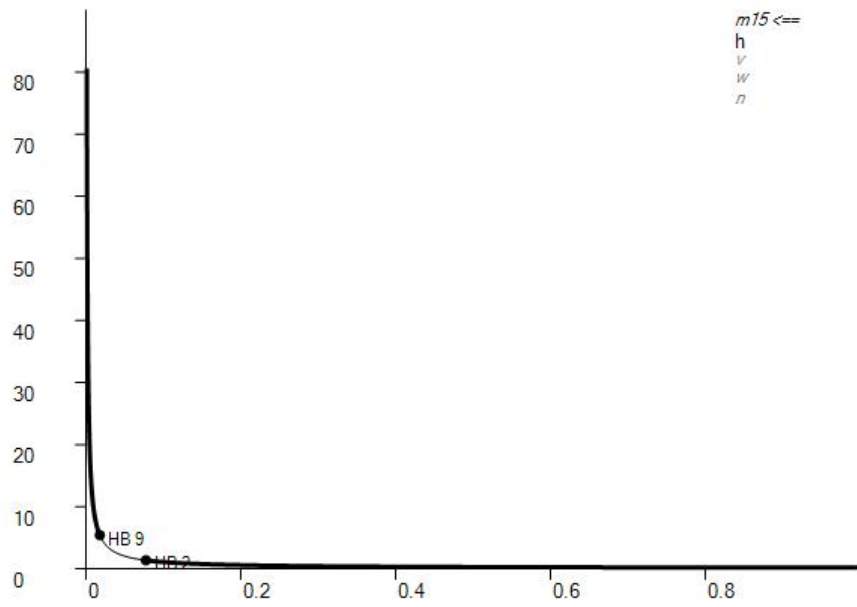


Kp3(rates of CORT production ):

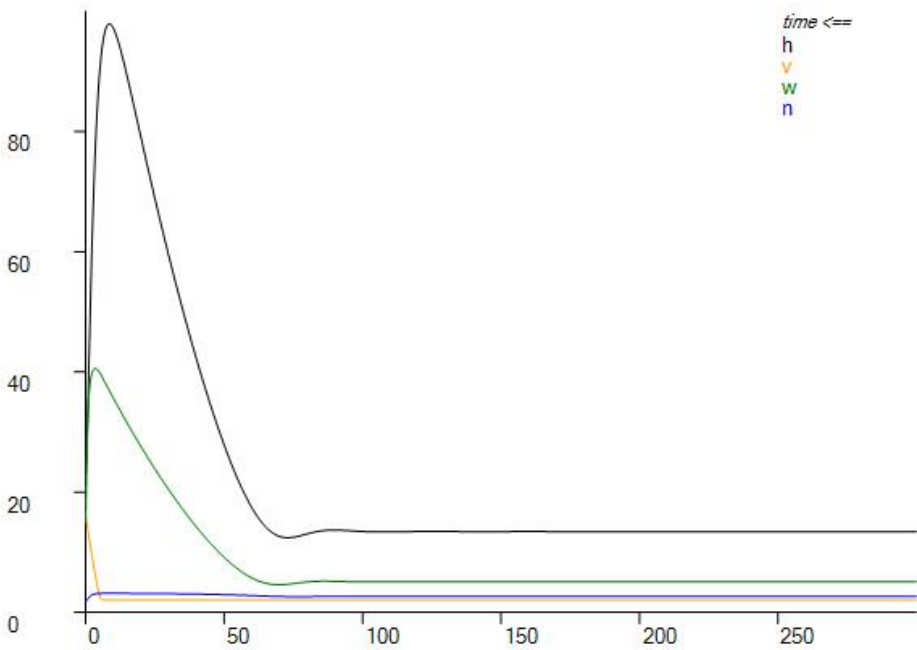
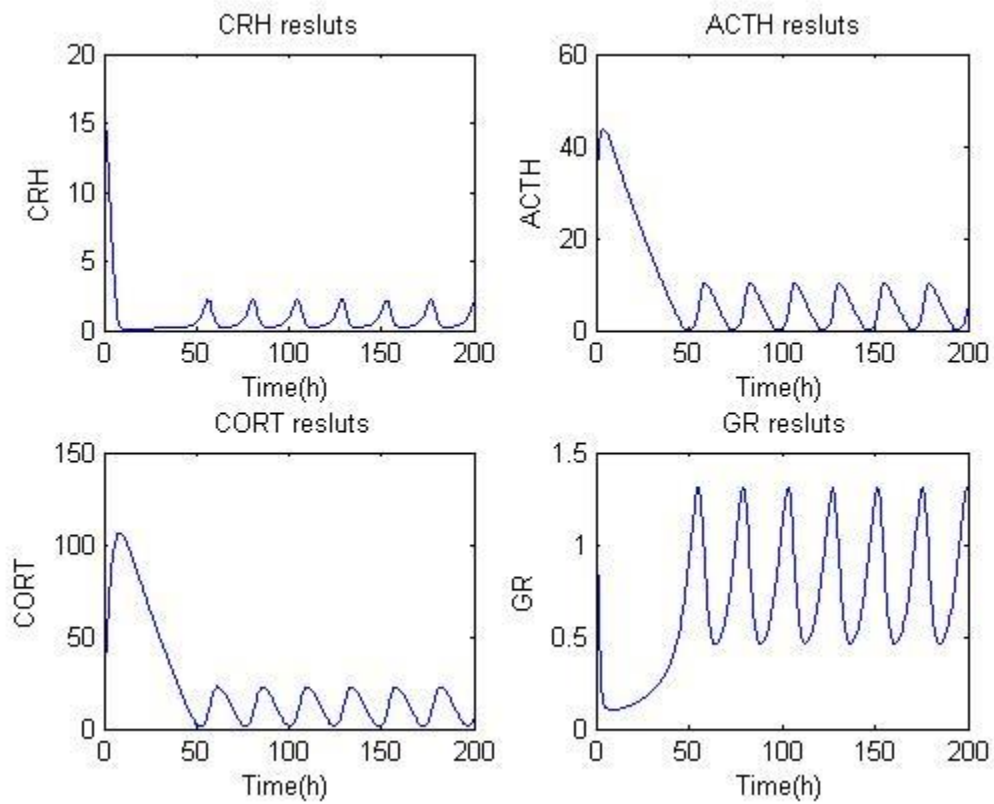


Kpb(rates of GR production ):

One Parameter Bifurcation Data [1/1]: m15

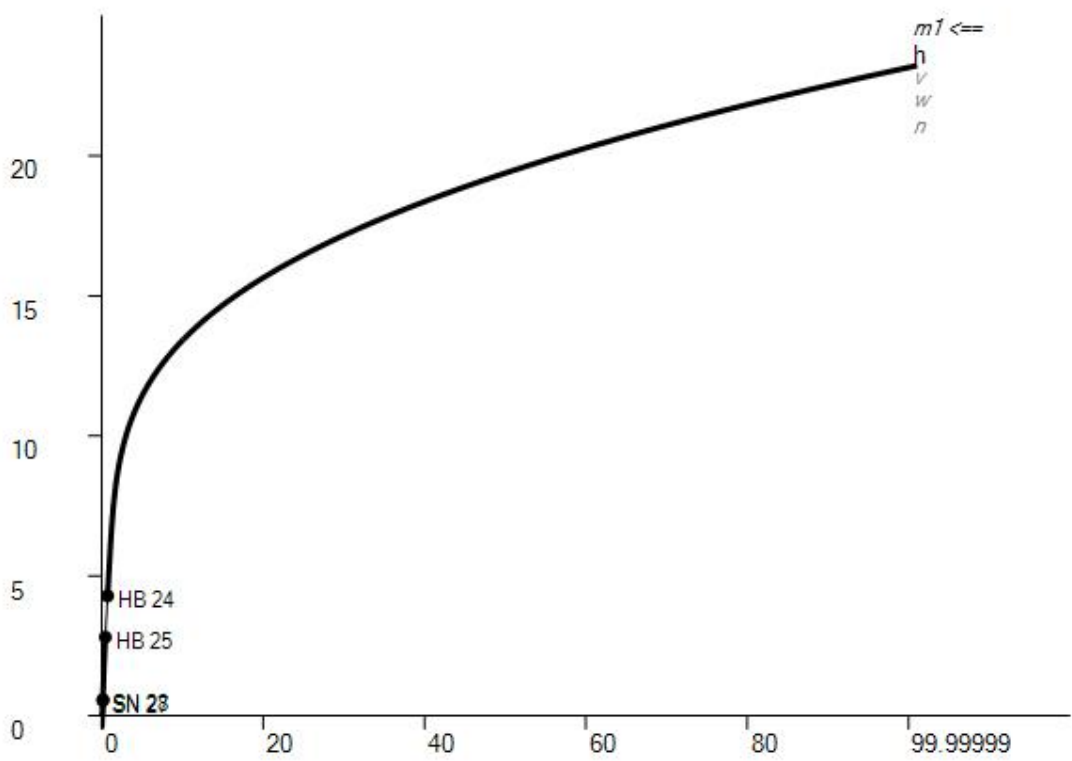


## Normal Case:

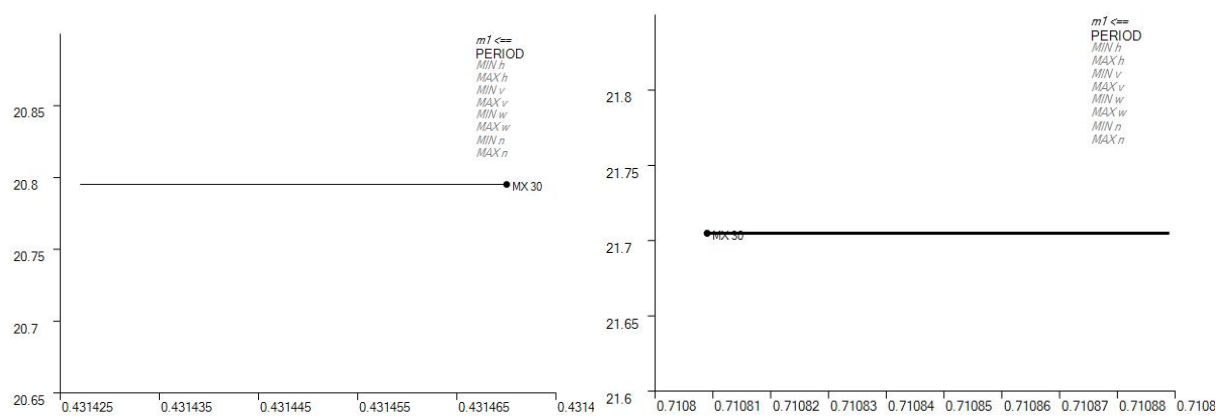


Very Different! No period solutions. Use same method RK4 to solve the problems.

K-stress:

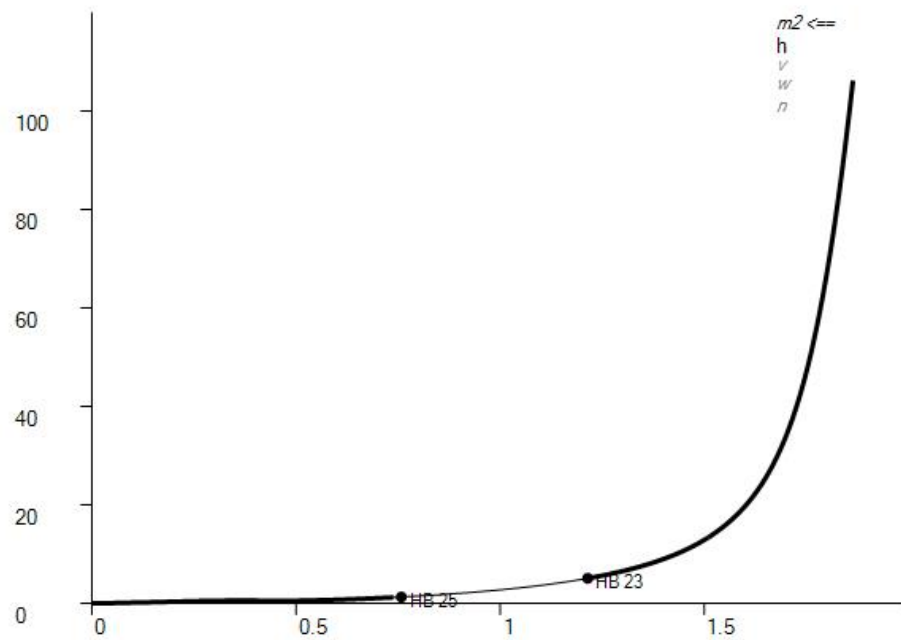


Starting point is around 0.43 and end point is about 0.71. Period are both around 22 and not convergent. Starting point is close but end point was far different.



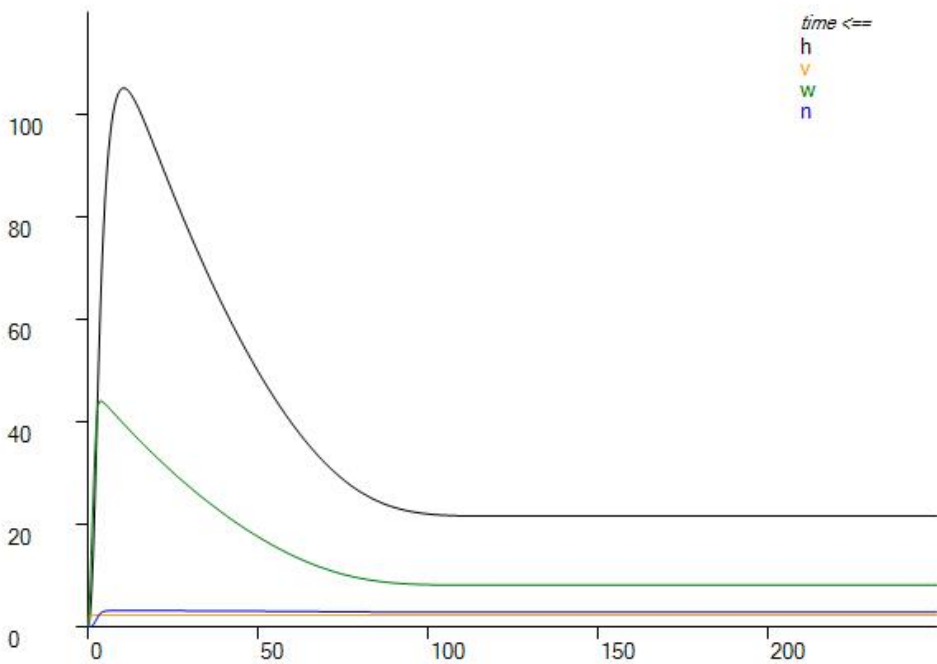
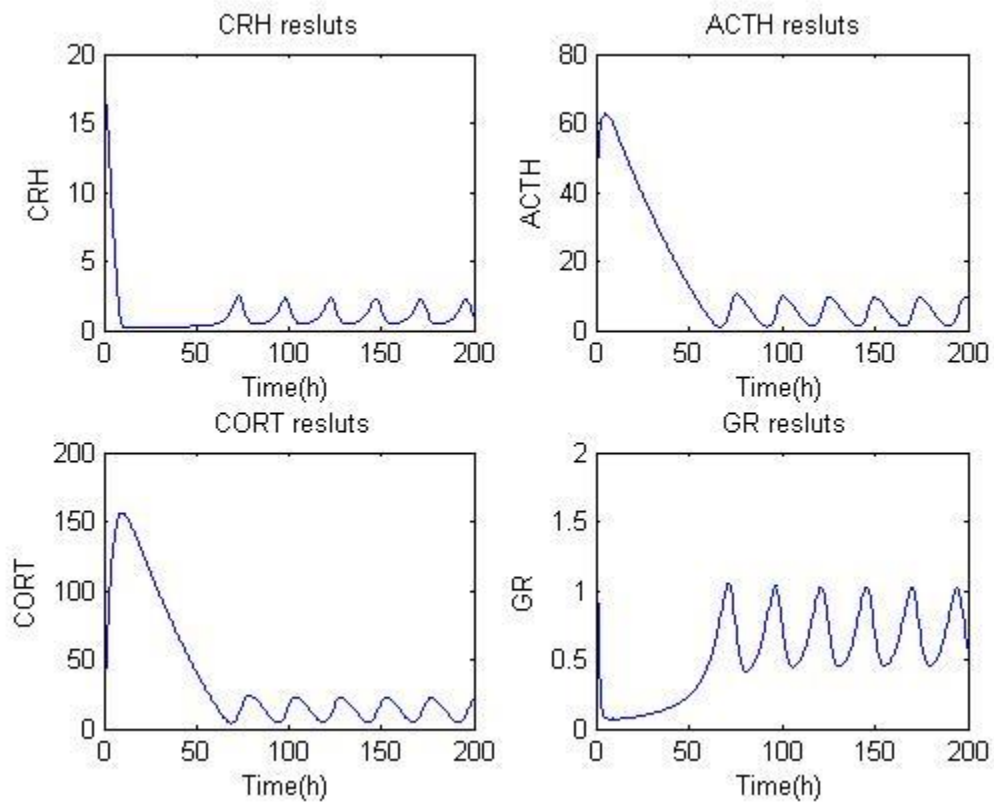
K-i





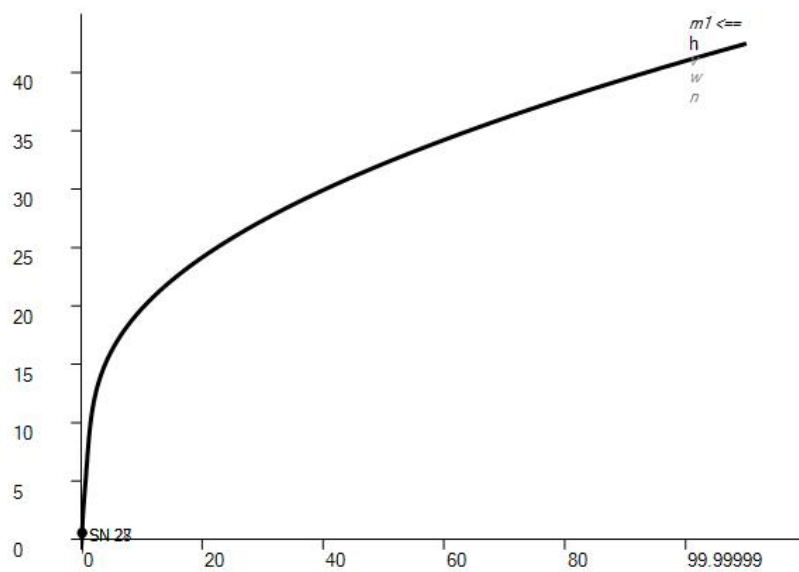
HB26: 0.76 HB23:1.22

## Depressed Case:



Again, the results are very different with matlab results.

k-stress:



No bifurcation points, only a Saddle Node.

K-i:

