

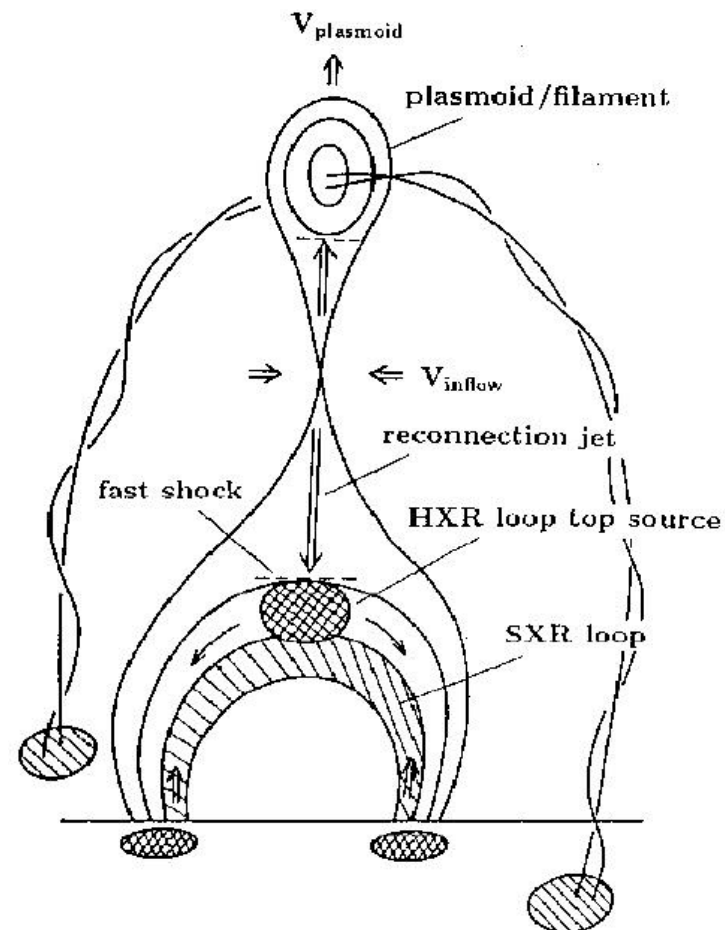
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# Post Reconnection Evolution of a Flux Tube (PREFT)

**Patrick McCreery**

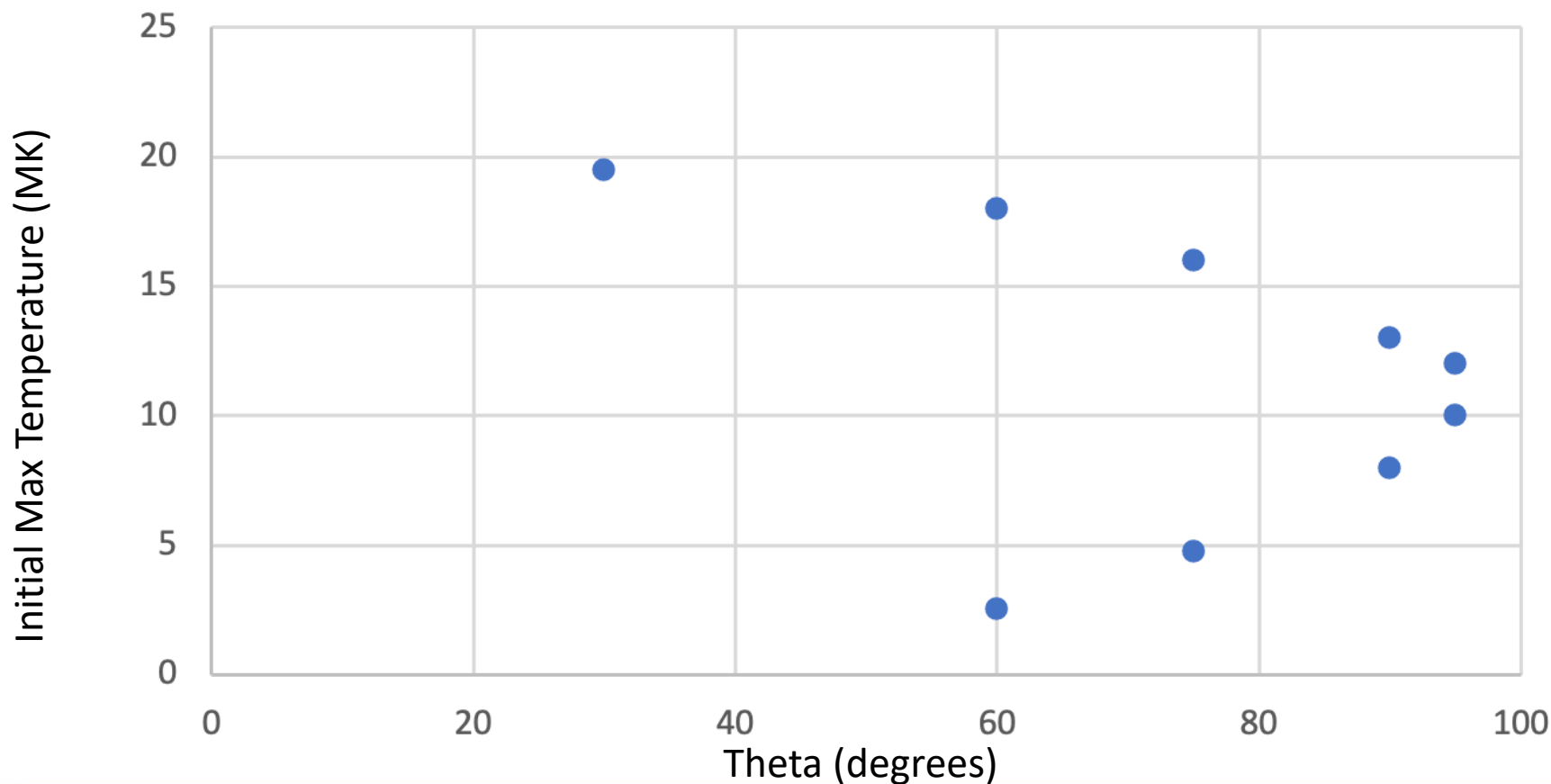
# First 2 Weeks

- PREFT
  - Learning the code and the physics
  - See how the evolution of the FT changes with different parameters
- Plotting
  - Learn about the structure of the data PREFT provides
- Animating
  - Look at the evolution of the flux tube and the properties over time



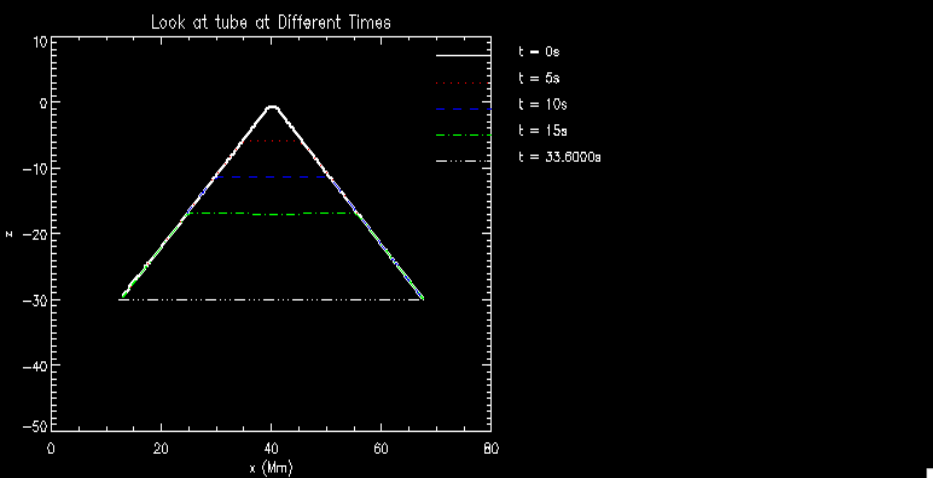
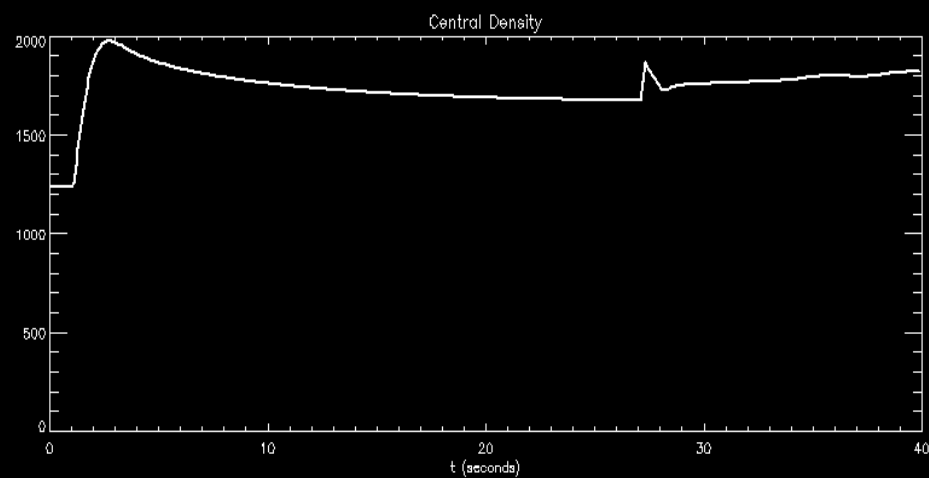
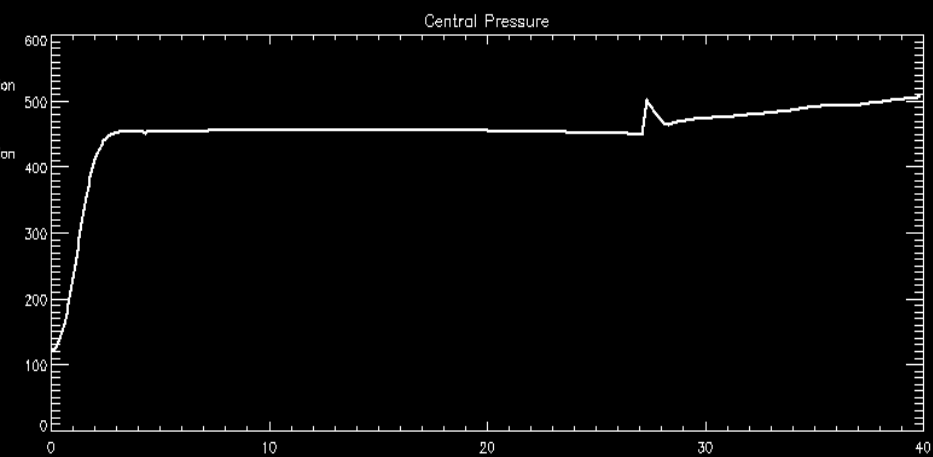
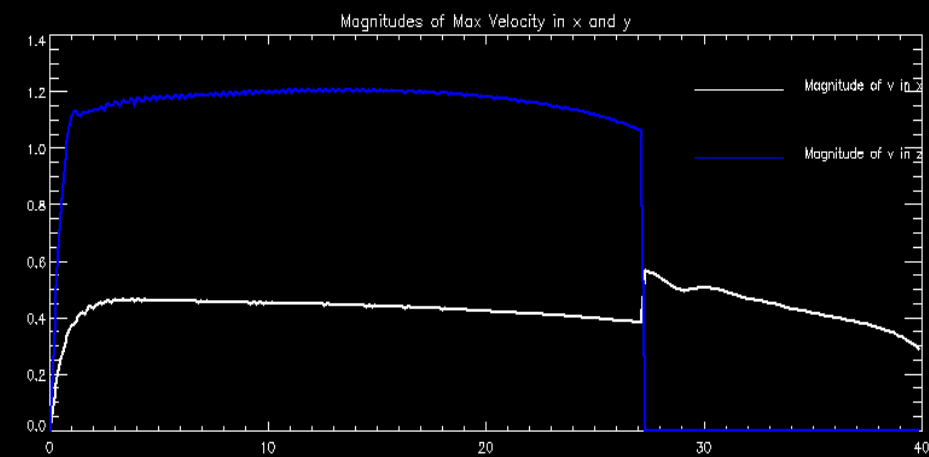
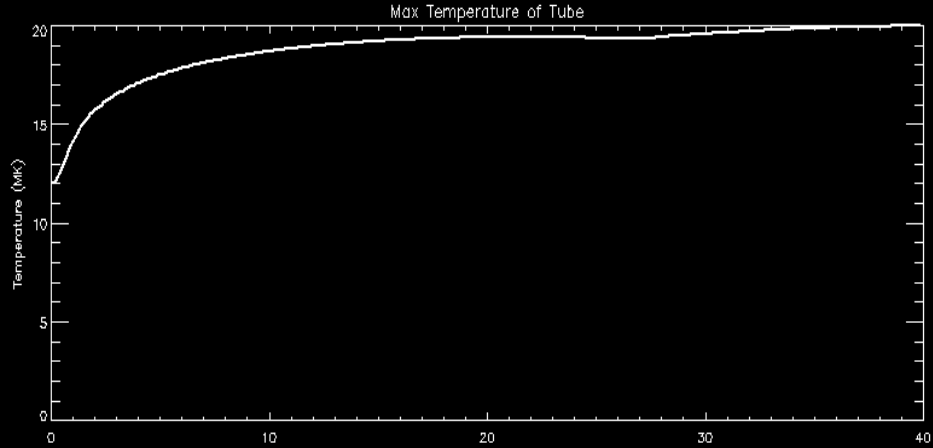
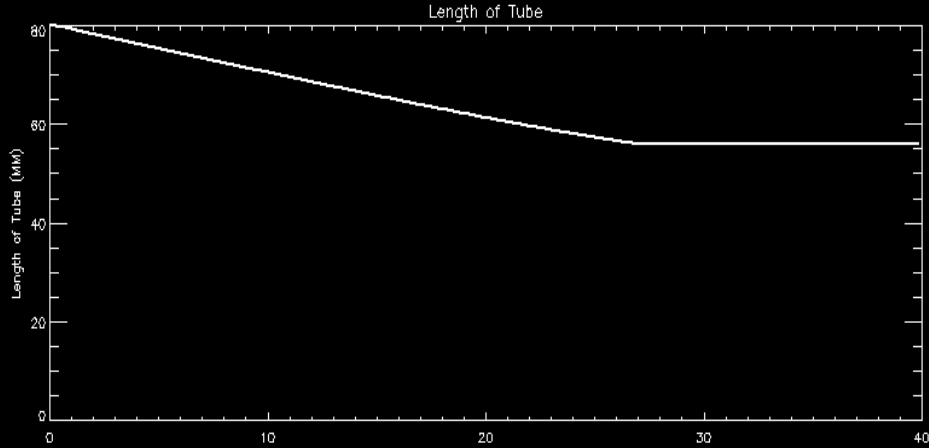
# Last 2 Weeks

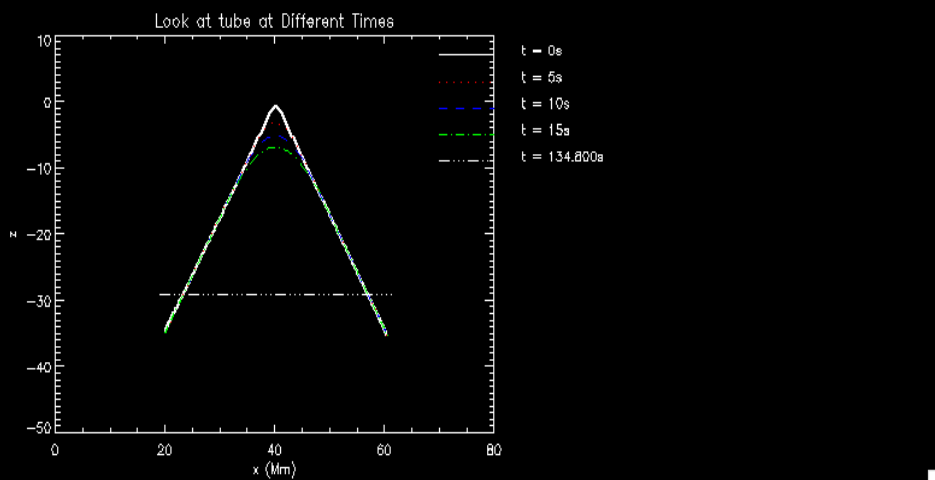
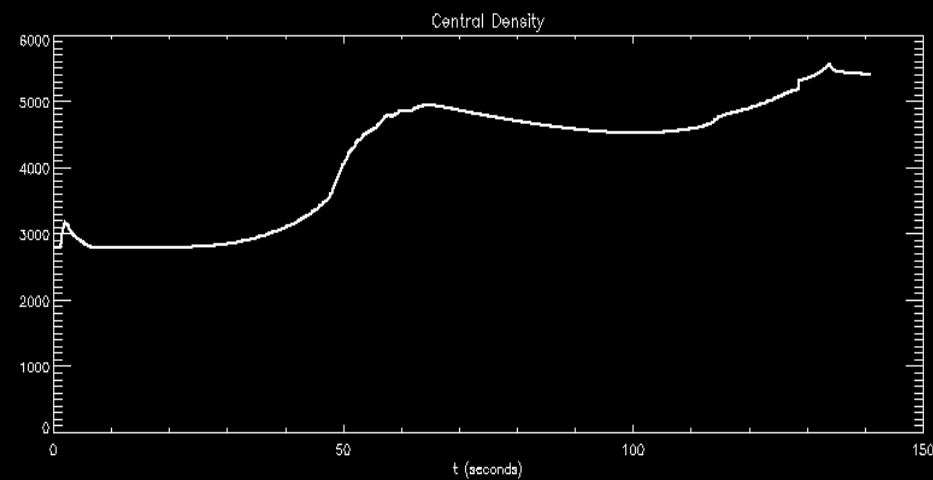
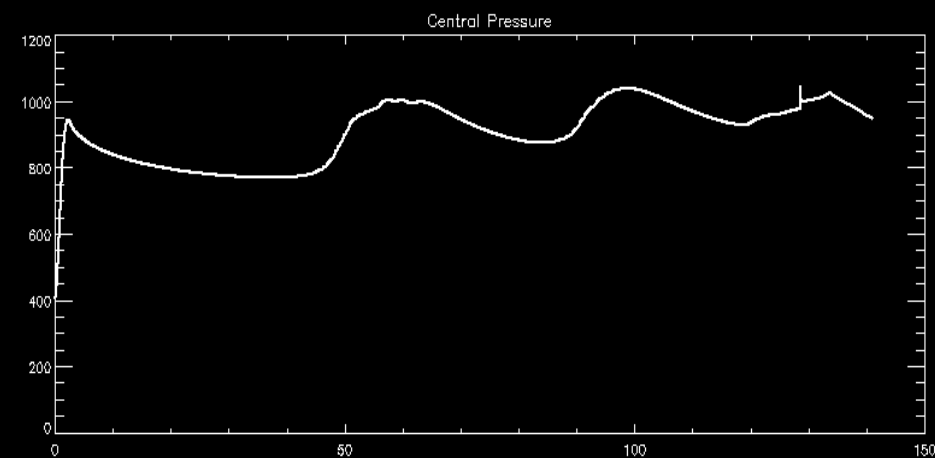
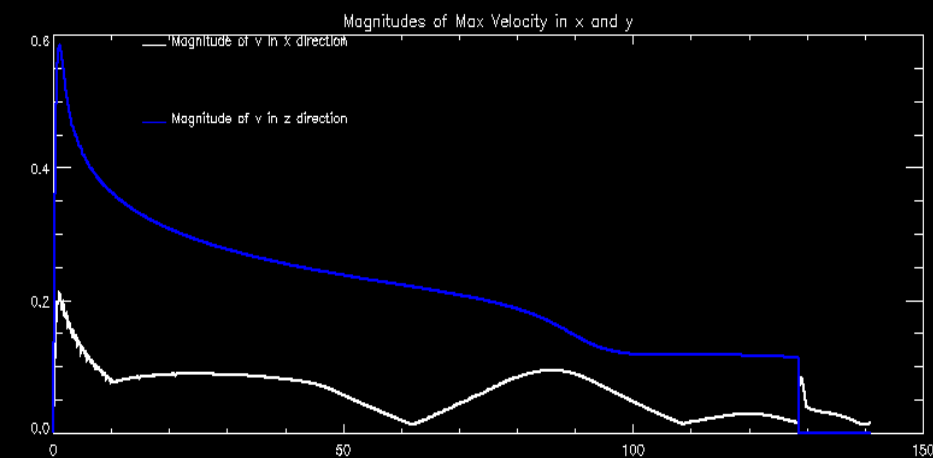
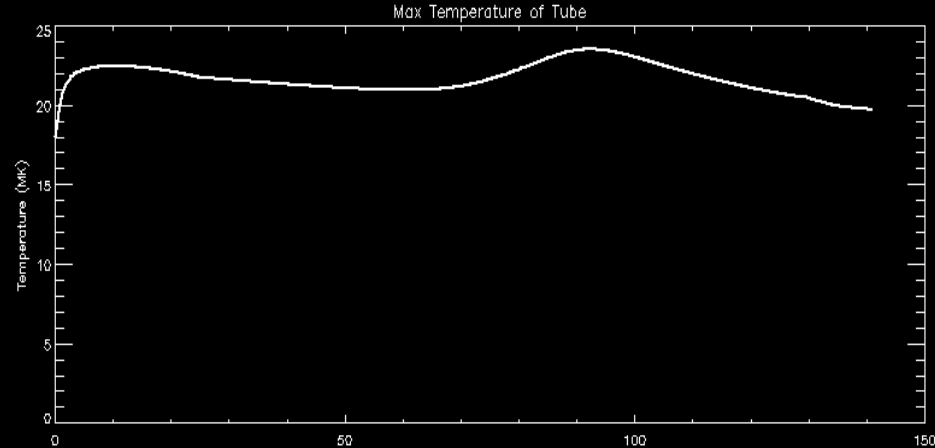
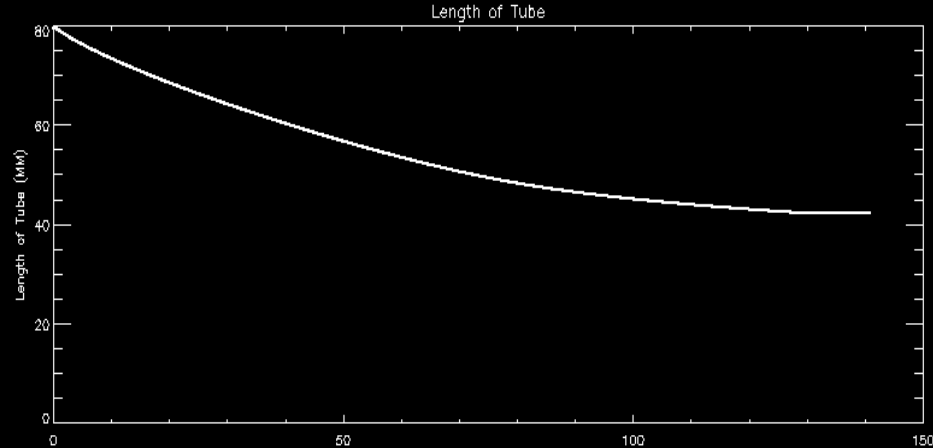
- Contours of 20 MK final temperatures
  - Changed:  $T_{\text{max\_init}}$  and  $\theta$
  - Not-changed:  $B$ ,  $\text{init\_length}$ ,  $\text{final\_length}$

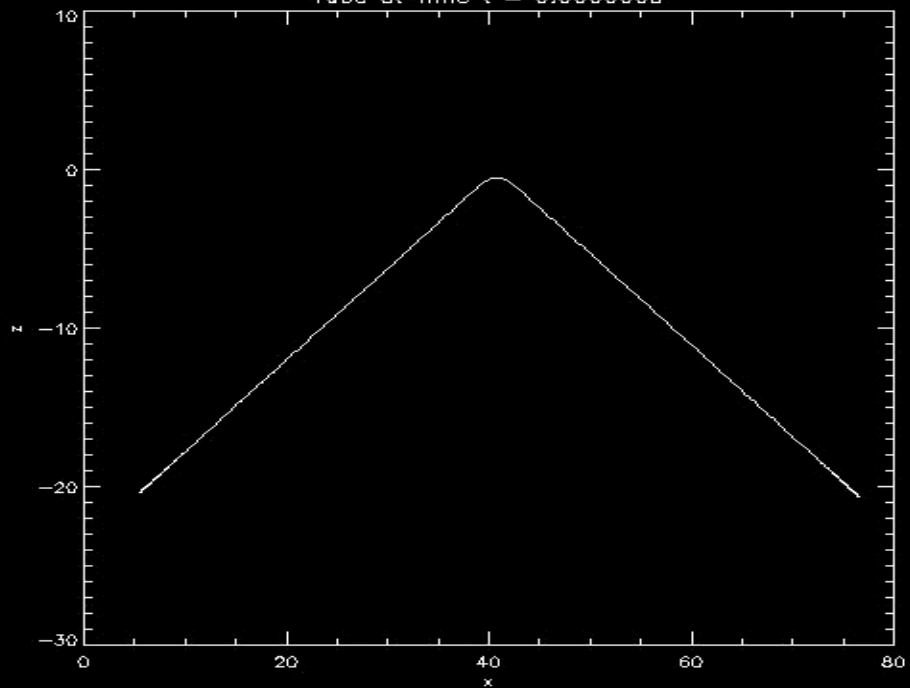
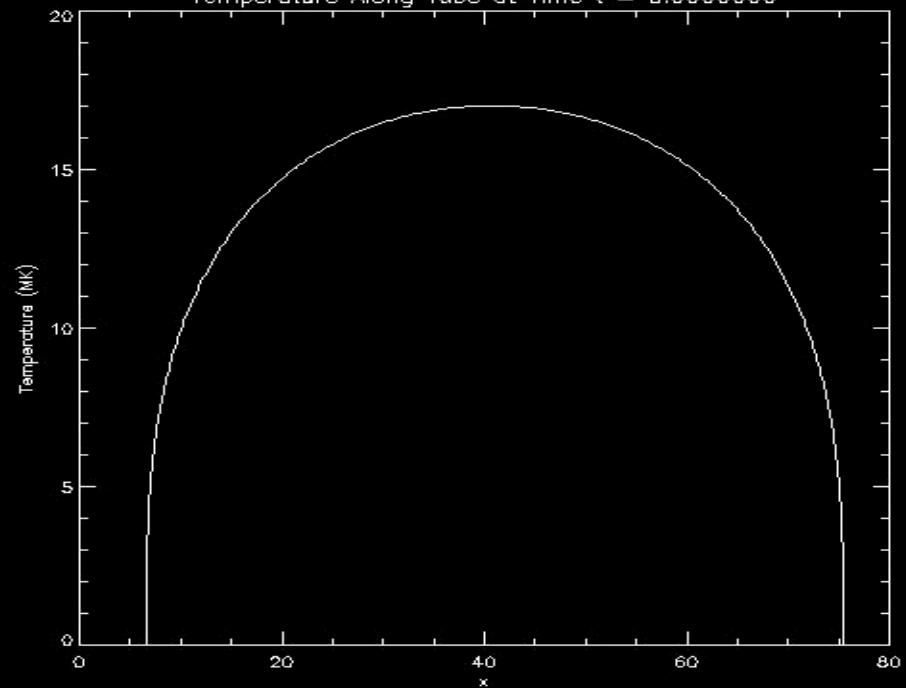
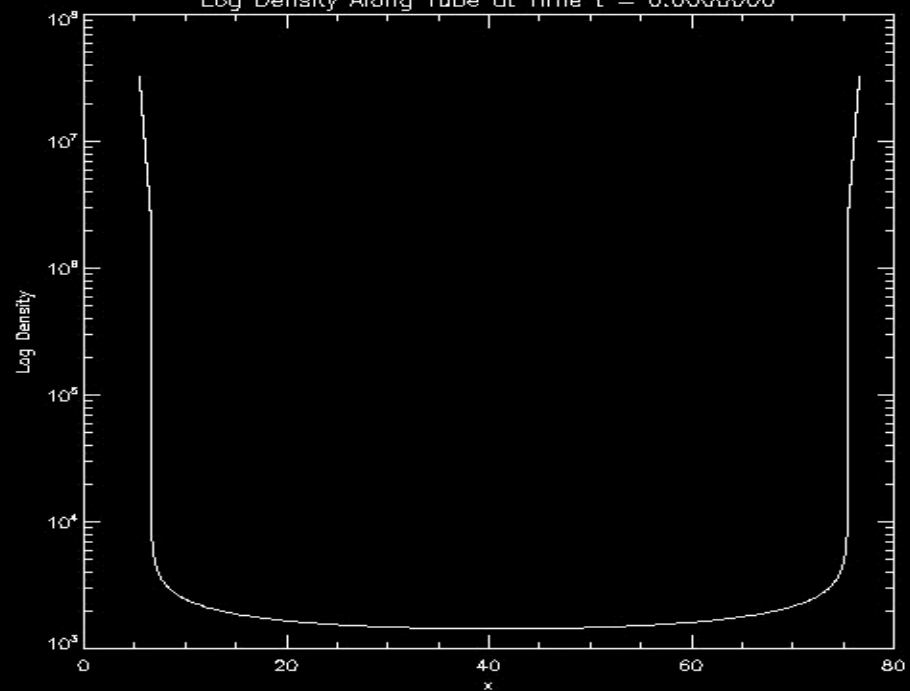
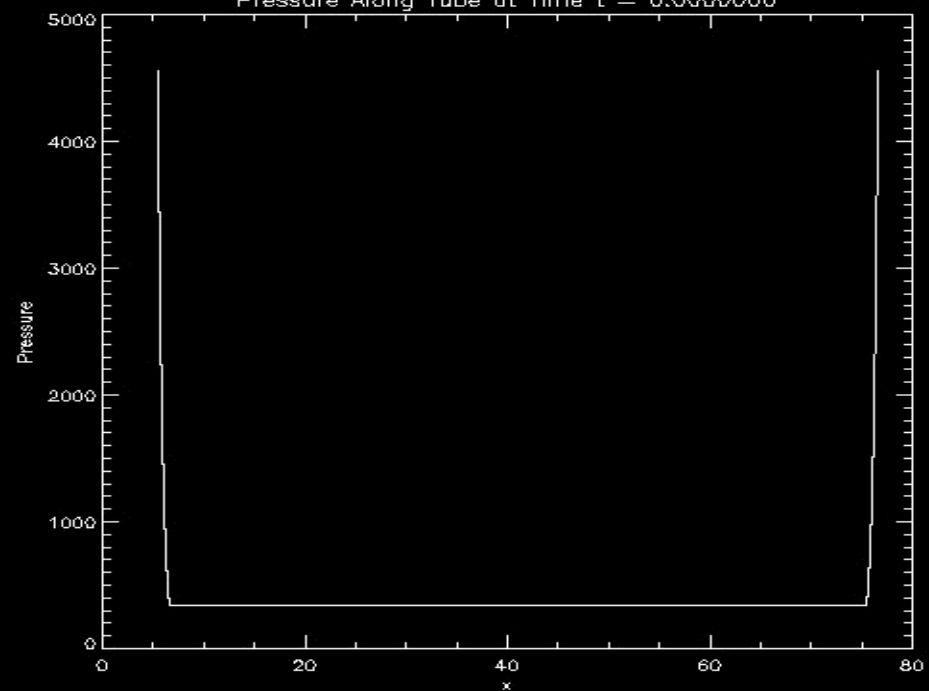


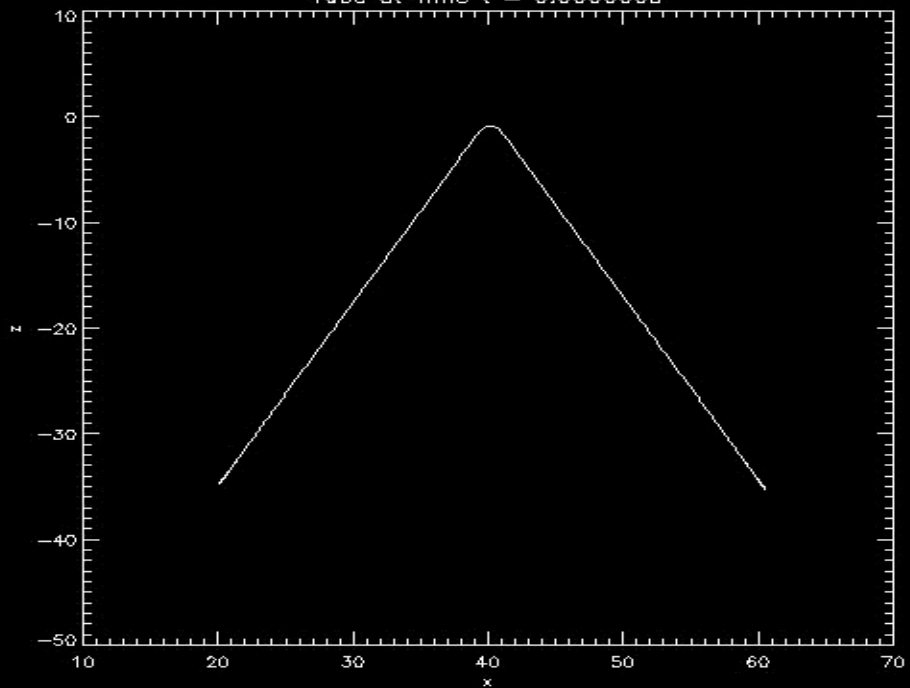
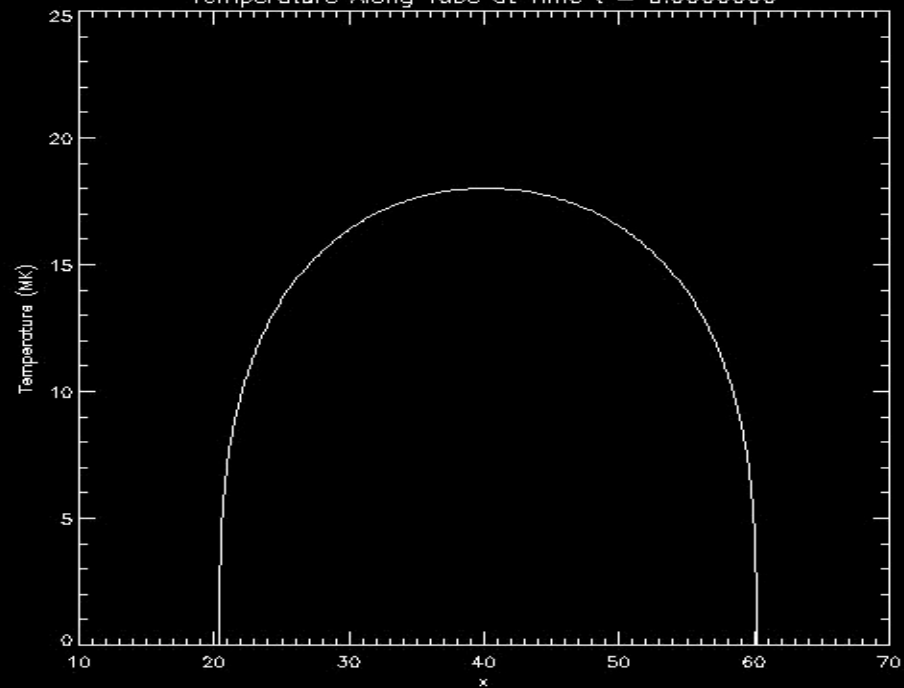
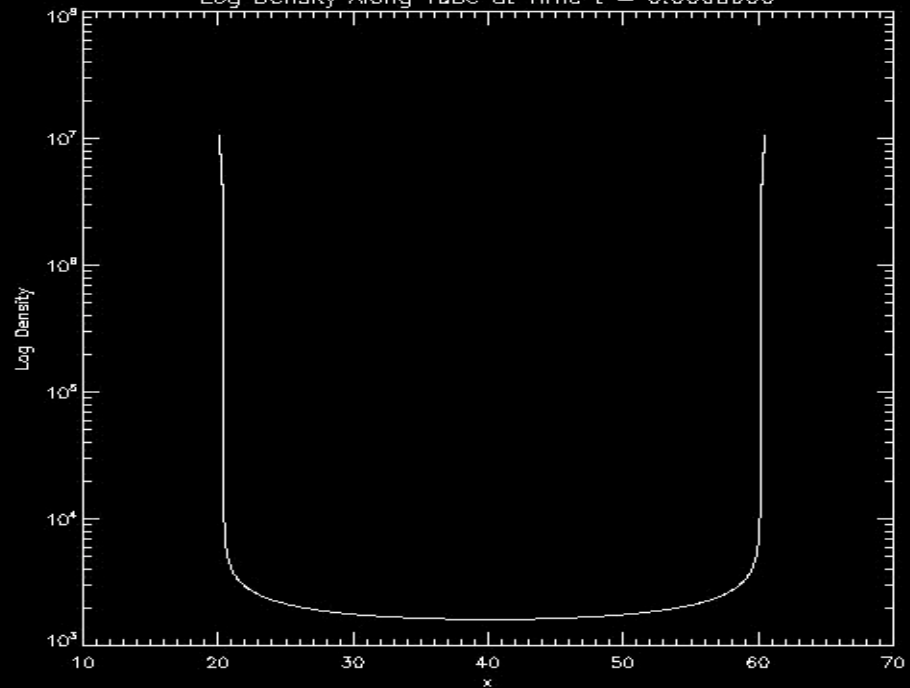
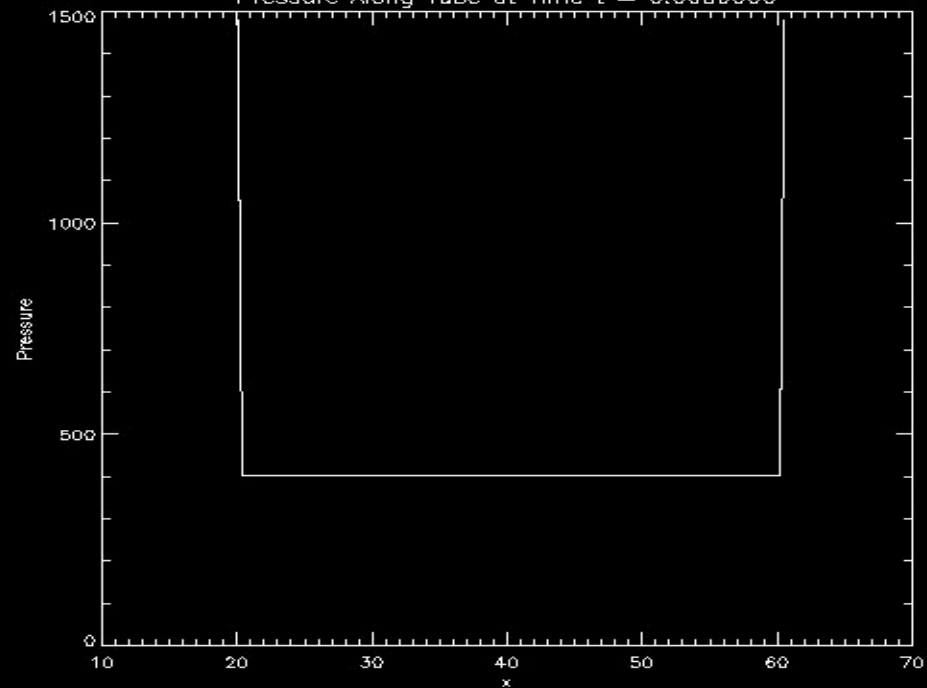
# Last 2 Weeks

- Introduction of drag
  - Changes in tube shape, and the evolution of properties





Tube at Time  $t = 0.0000000$ Temperature Along Tube at Time  $t = 0.0000000$ Log Density Along Tube at Time  $t = 0.0000000$ Pressure Along Tube at Time  $t = 0.0000000$ 

Tube at Time  $t = 0.0000000$ Temperature Along Tube at Time  $t = 0.0000000$ Log Density Along Tube at Time  $t = 0.0000000$ Pressure Along Tube at Time  $t = 0.0000000$ 



# Next 2 Weeks

- Contours again!