Arras meeting 11/12/24

- Orbital period
  - Synchronous rotation = once per orbit
  - Orbital frequency in torque formula
  - Rotation rate is completely separate
  - More rapid rotation = less time to apply force = weaker winds
  - Vary rotation rate but keeping fixed orbital frequency
  - Keep orbital frequency but change rotation
    - Changing it to be slower —> longer
    - Higher frequency
  - Run three simulations: half a day, one day, two days
  - Just change orbital advection piece
- Change pressure at base
  - Range of thicknesses of planetary atmospheres
  - Completely thick gaseous vs thin atmosphere?
  - Not letting stuff go through it = like solid surface
  - Changing pressure (one bar, 2 bars, four bars)
  - How does it affect formulas
    - Thermal tide increases very rapidly with pressure
      - Higher pressures —> forcing weaker (?) delta t = smaller
- Get plot of torque
  - Find average of line
  - Want torque NOT averaging around zero
- Arras and Socrates
  - criticism: treating gaseous as solid surface, thermal tides smaller with no solid surface
  - Increasing base pressure would be interesting
- Make plots of temperature, gas density, pressure