

Energía $E \left[\text{kg} \frac{\text{m}^2}{\text{s}^2} \right]$, densidad $\rho \left[\frac{\text{kg}}{\text{m}^3} \right]$, tiempo $t(\text{s})$

Radio $R[\text{m}]$

$$E \propto \rho^a t^b R^c$$

$$\dim[E] = \dim[\rho^a t^b R^c]$$

$$\dim[E] = \dim[\rho]^a \dim[t]^b \dim[R]^c$$

$$\frac{M L^2}{T^2} = \frac{M^a}{L^{3a}} T^b L^c$$

$$M^1 L^2 T^{-2} = M^a T^b L^{c-3a}$$

Sol: $a=1$

$$b=-2$$

$$+2 = c - 3a$$

$$+2 + 3a = c$$

$$+2 + 3(1) = c$$

$$c=5$$

finalmente

$$E \propto \rho t^{-2} R^5 //$$