$$(U-c)\left(\tilde\psi_{yy}-k^2\tilde\psi\right)+\left(\beta-U_{yy}\right)\tilde\psi=0$$

$$\mathcal{E}(k)=\mathcal{K}\epsilon^{2/3}k^{-5/3}$$

$$f_0(\vec u_1-\vec u_2)=g'$$

$$\omega=\bar u k-\frac{\beta k}{\kappa^2}$$

$$m=(u+\Omega r\cos\vartheta)r\cos\vartheta$$

$$B=\frac{\vec v^2}{2}+c_pT+gz=\text{const}$$

$$q_1=\beta y+\left[\nabla^2+\frac{\partial}{\partial z}\left(\frac{f_0^2}{N^2}\frac{\partial}{\partial z}\right)\right]$$

$$\Gamma_d=\frac{g}{c_p}$$

$$f\times u\approx-\frac{1}{\rho}\nabla_z p$$

$$f=2\omega\sin\phi$$

$$C=\oint\vec v\cdot d\vec l$$

$$\mathrm{Bu}=\left(\frac{\mathrm{Ro}}{\mathrm{Fr}}\right)^2$$

$$\frac{D}{Dt}\left(\frac{\vec\omega_a\cdot\nabla\theta}{\rho}\right)=0$$

$$\omega^2=\frac{K^2N^2}{k^2+m^2}$$

$$L_\nu\sim\left(\frac{\nu^3}{\epsilon}\right)^{1/4}$$

$$APE=\frac{R p_s^{-\kappa}}{2}\int_0^{p_s}p^{\kappa-1}\left(-\frac{\partial\bar\theta}{\partial p}\right)\overline{\theta'^2}\,dp$$

$$C=\oint\vec v\cdot d\vec l$$

$$\theta=\theta(0)-\frac{\theta_0\Omega^2y^4}{2gHa^2}$$

$$\frac{de_s}{dT}=\frac{L_ce_s}{R_vT^2}$$

$$\psi'=\mathrm{Re}\,\Psi e^{i(kx+ly+mz-\omega t)}$$

$$\sigma\sim\frac{U}{L_d}=\Lambda\frac{f_0}{N}$$

$$\varpi=\nabla\times\vec v$$

$$\mathcal{F}=-\overline{u'v'}\vec j+\frac{f_0}{N^2}\overline{v'b'}\vec k$$

$$\frac{D}{Dt}\oint\vec v\cdot d\vec r$$

$$\frac{\partial}{\partial t}\left\{\iint\frac{1}{2}\frac{\overline{q'^2}}{\partial_y\bar q}\,dy\,dz\right.$$

$$m=\int\left[\frac{1}{2}\frac{f_0}{N^2}\frac{\overline{b'^2}}{\partial_y\bar b}\right]_0^H$$

$$L_\nu\sim\left(\frac{\nu^3}{\epsilon}\right)^{1/4}$$