

Fig. 1 Atmospheric upward heat flow process

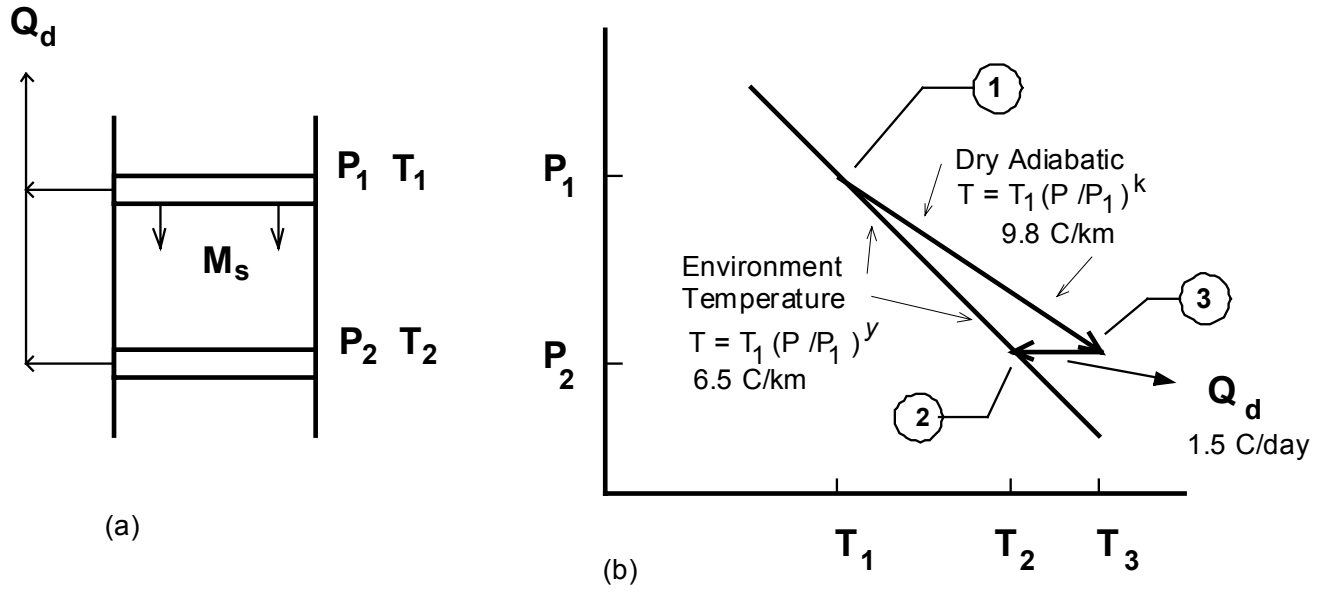


Fig. 2 Without cooling the temperature of the subsiding layer would exceed the temperature of the environment.

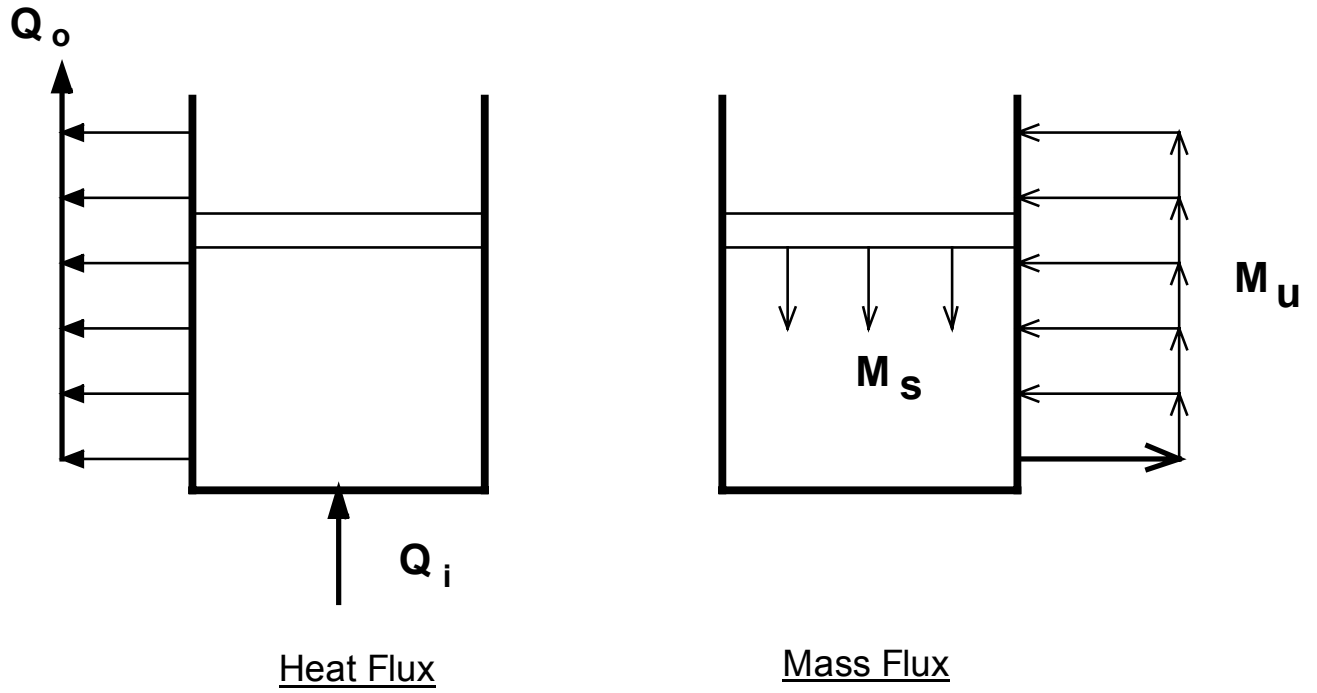
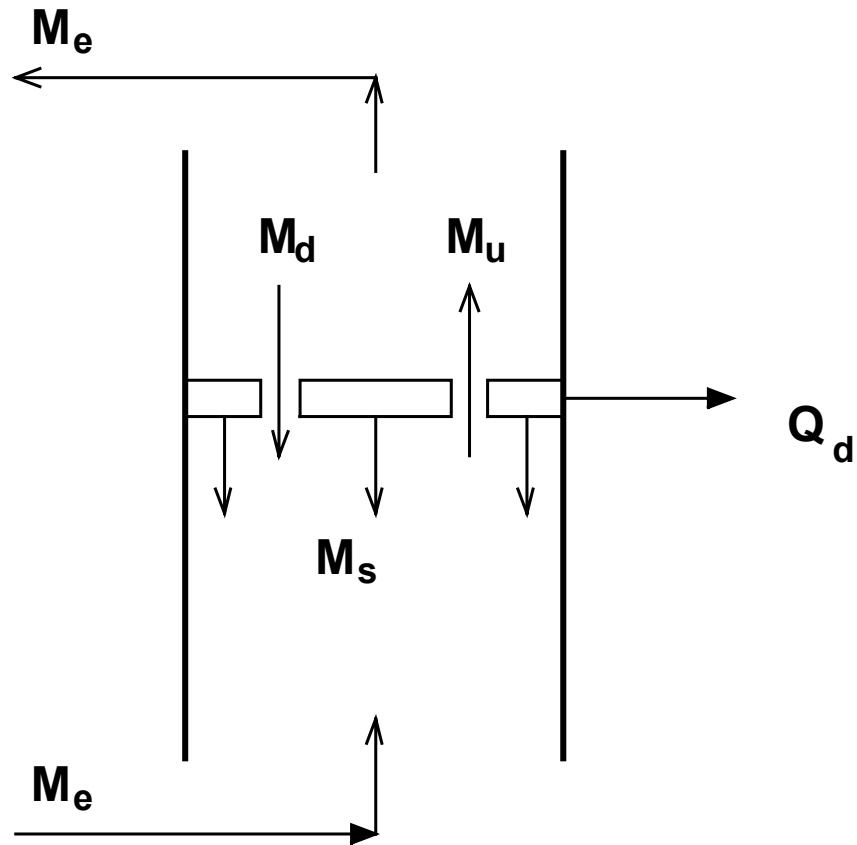


Fig. 3 Heat and mass flux diagrams for a system heated from the bottom and cooled at higher elevations

---



$$M_s = - ( M_u + M_d + M_e )$$

Fig. 4 Net subsidence of the layer depends on updrafts, downdrafts, and flow to other areas.

---

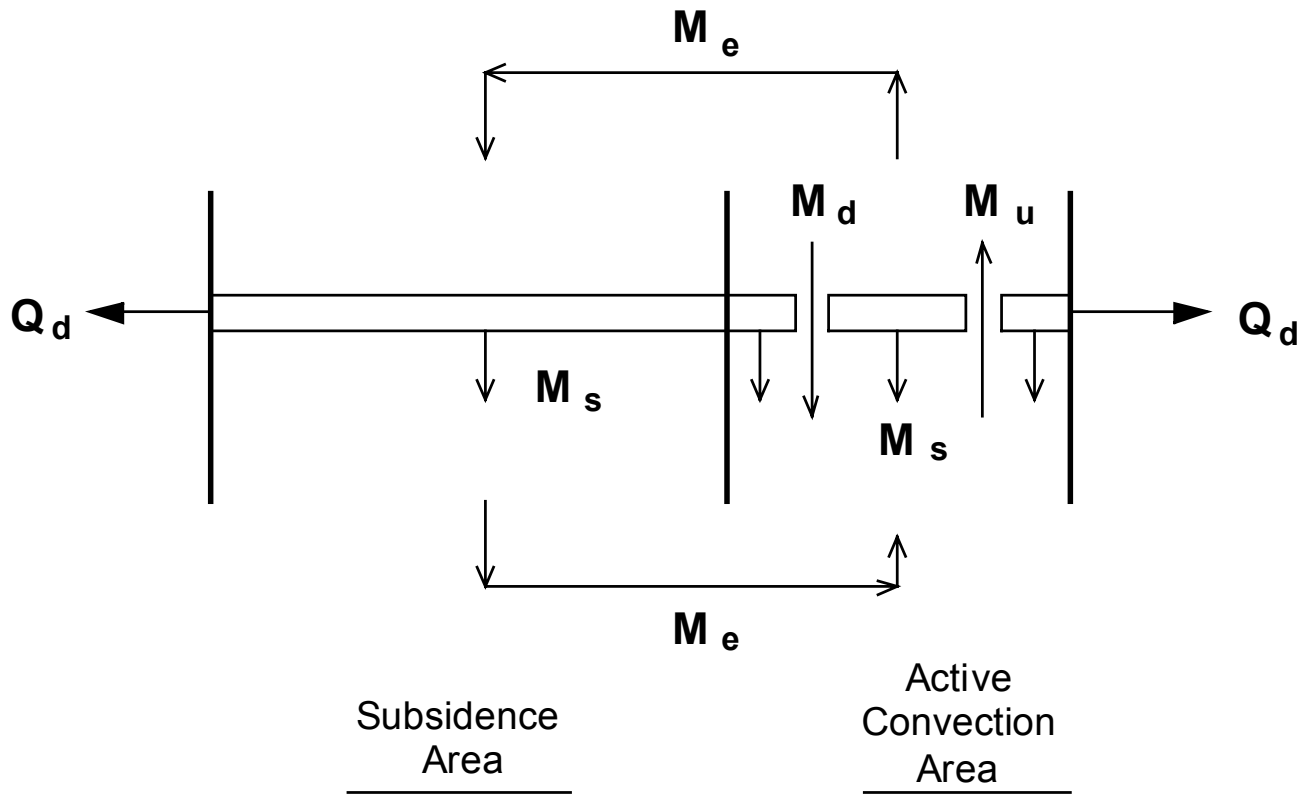


Fig. 5 Subsidence of the layer occurs in areas of active convection and in larger subsidence area.

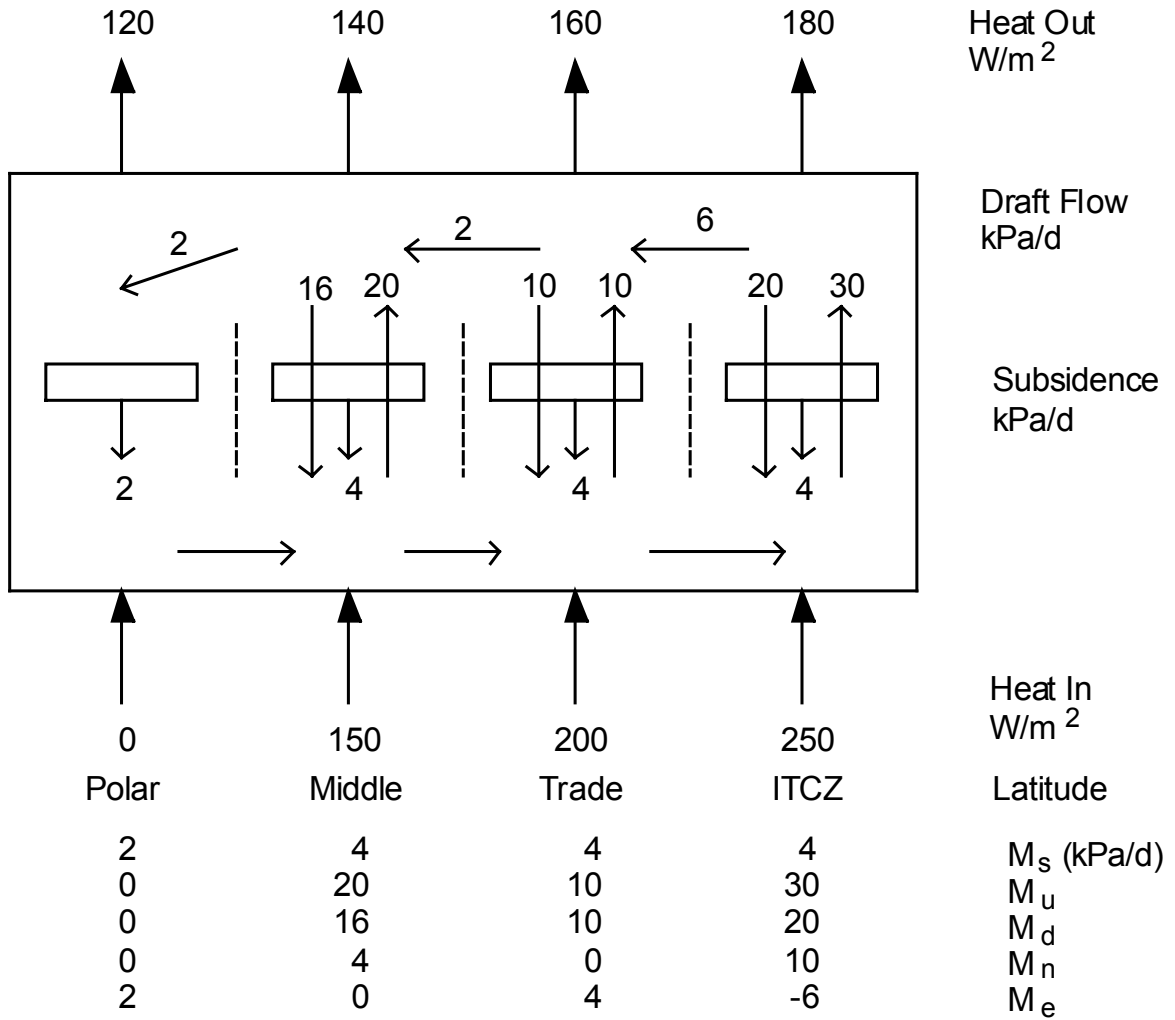


Fig. 6 Updraft are redistributed to produce subsidence required to compensate for radiative cooling.

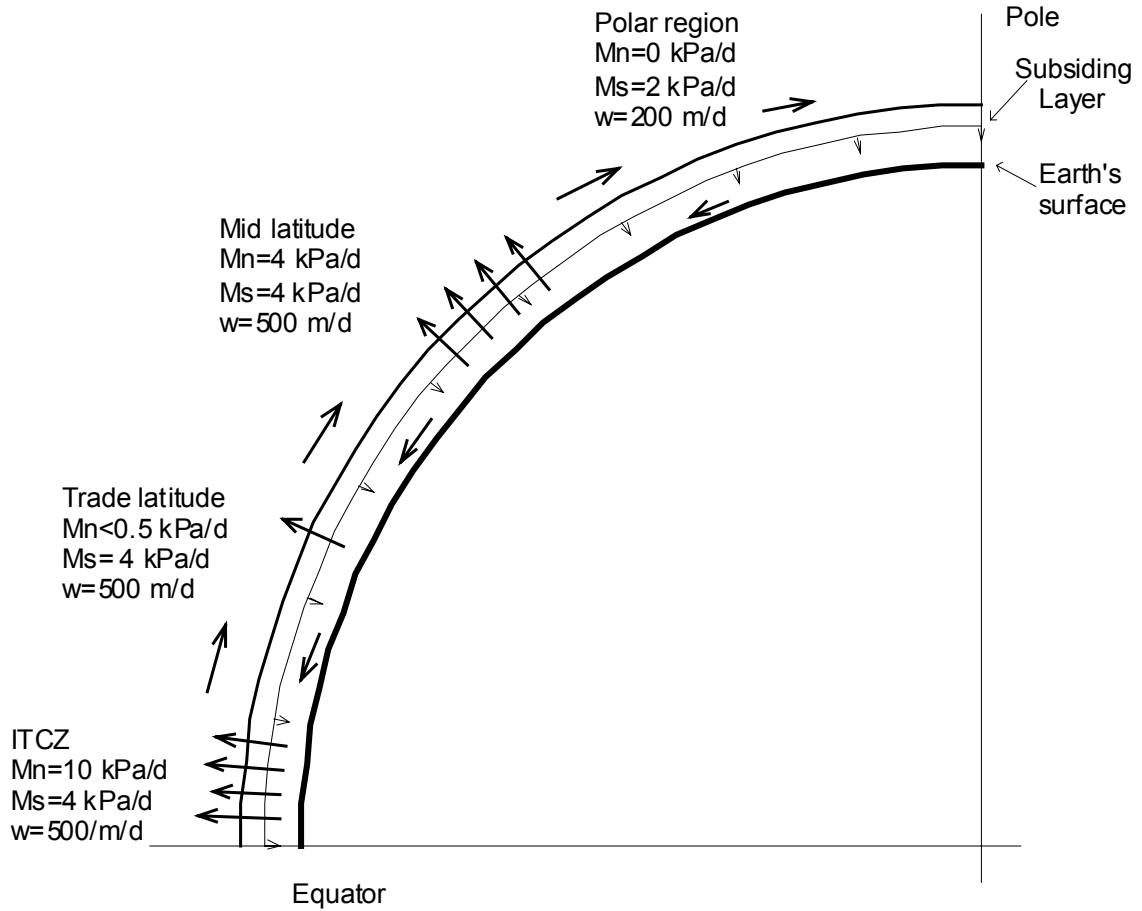


Fig. 7 Subsiding Layer General Circulation Model.

The drafts are redistributed by meridional flow as required to compensate for radiative cooling. The layers which are penetrated by drafts subside at roughly uniform velocity. The mass fluxes apply to layers at mid troposphere level.