

TABLE 1.4 Scales of Atmospheric Motions

Type of Motion	Horizontal Scale (m)
Molecular mean free path	10^{-7}
Minute turbulent eddies	10^{-2} to 10^{-1}
Small eddies	10^{-1} to 1
Dust devils	1 to 10
Gusts	10 to 10^2
Tornadoes	10^2
Cumulonimbus clouds	10^3
Fronts, squall lines	10^4 to 10^5
Hurricanes	10^5
Synoptic cyclones	10^6
Planetary waves	10^7