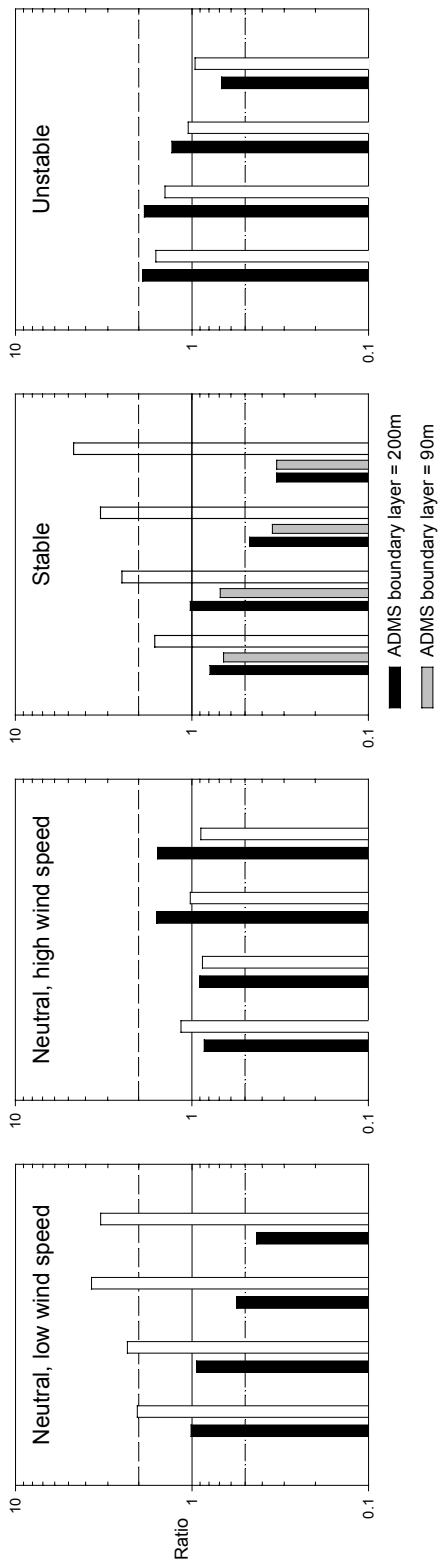


### Ratios of Maximum Concentrations



### Ratios of Distance to Maximum Concentration

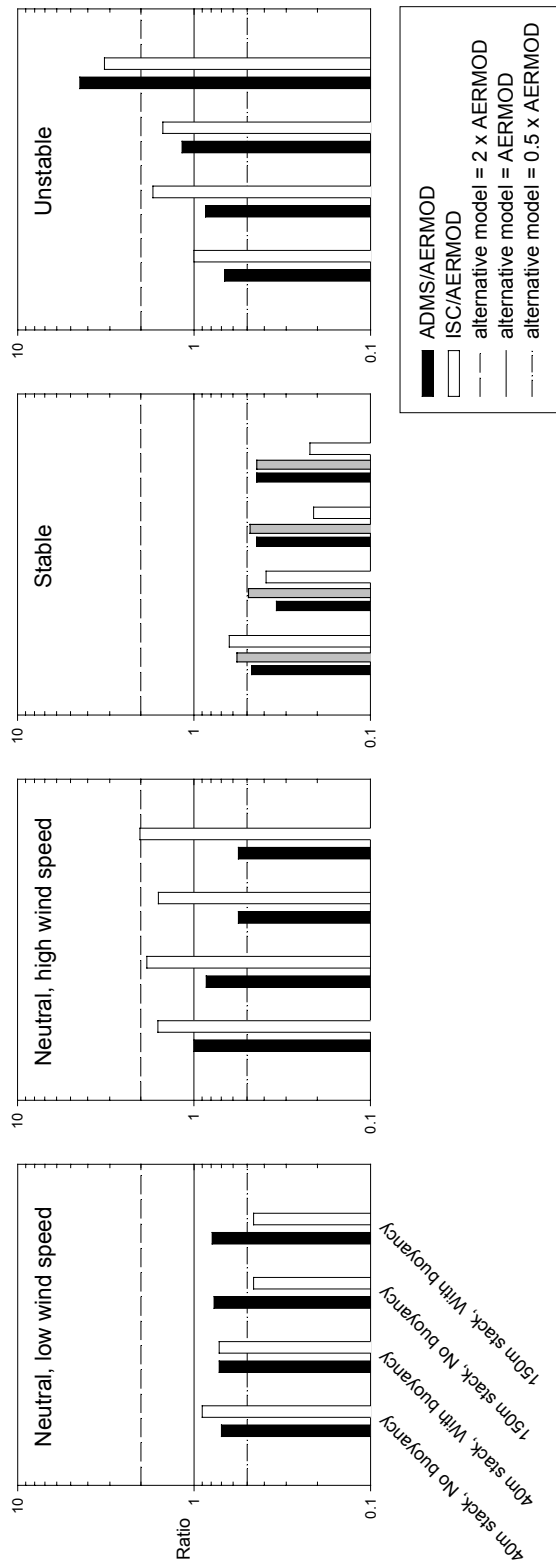


Figure 11. Basic dispersion rates for single conditions. Bar charts of maximum concentration and their distances from the source. Ratios of values relative to AERMOD.

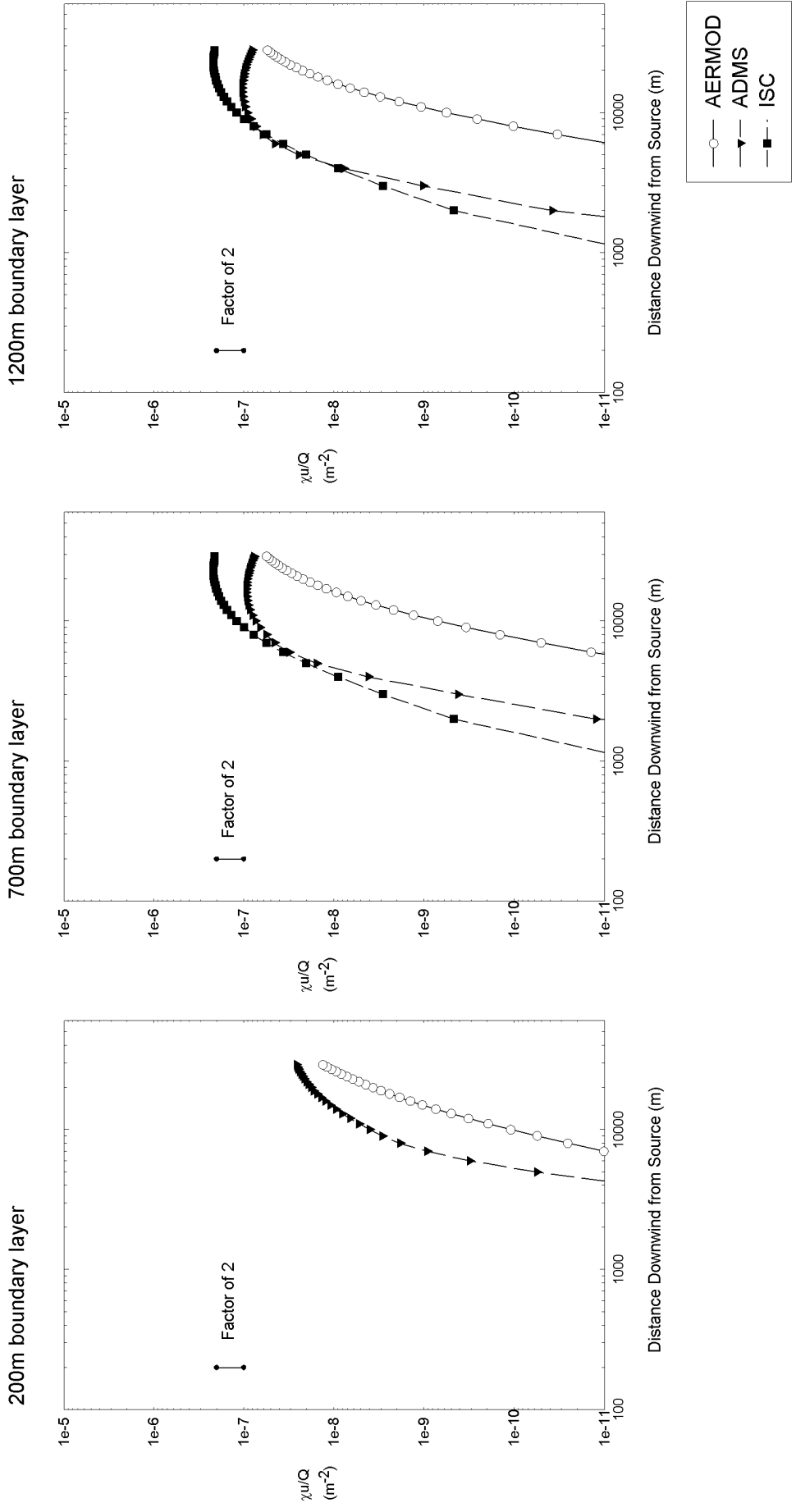


Figure 12. Plume interaction with varying depth neutrally stable boundary layers. Normalised ground level plume centreline concentrations. 150m stack discharge with buoyancy.

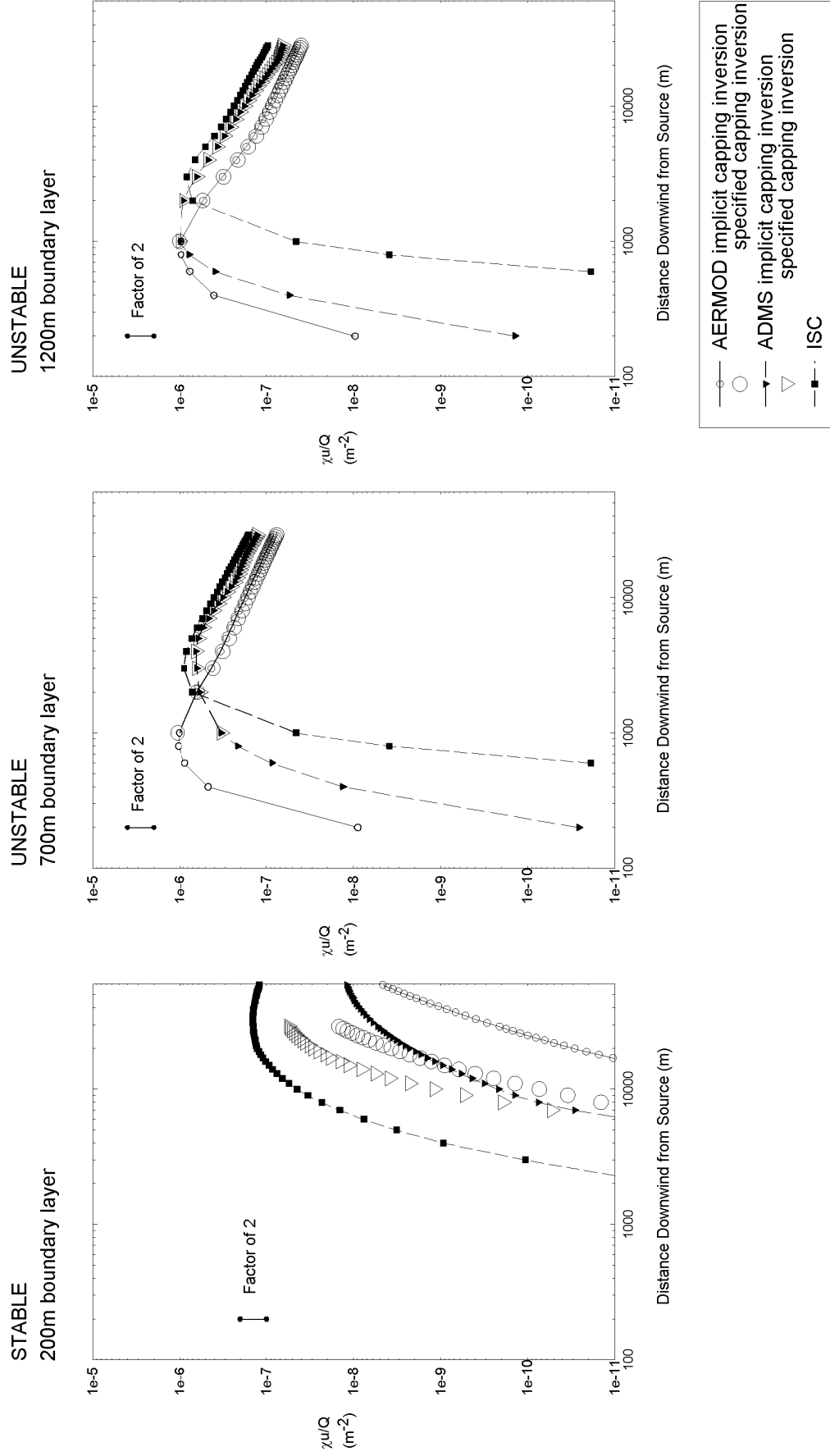


Figure 13. Plume interaction with varying depth stable and unstable boundary layers. Normalised ground level plume centreline concentrations. 150m stack discharge with buoyancy.

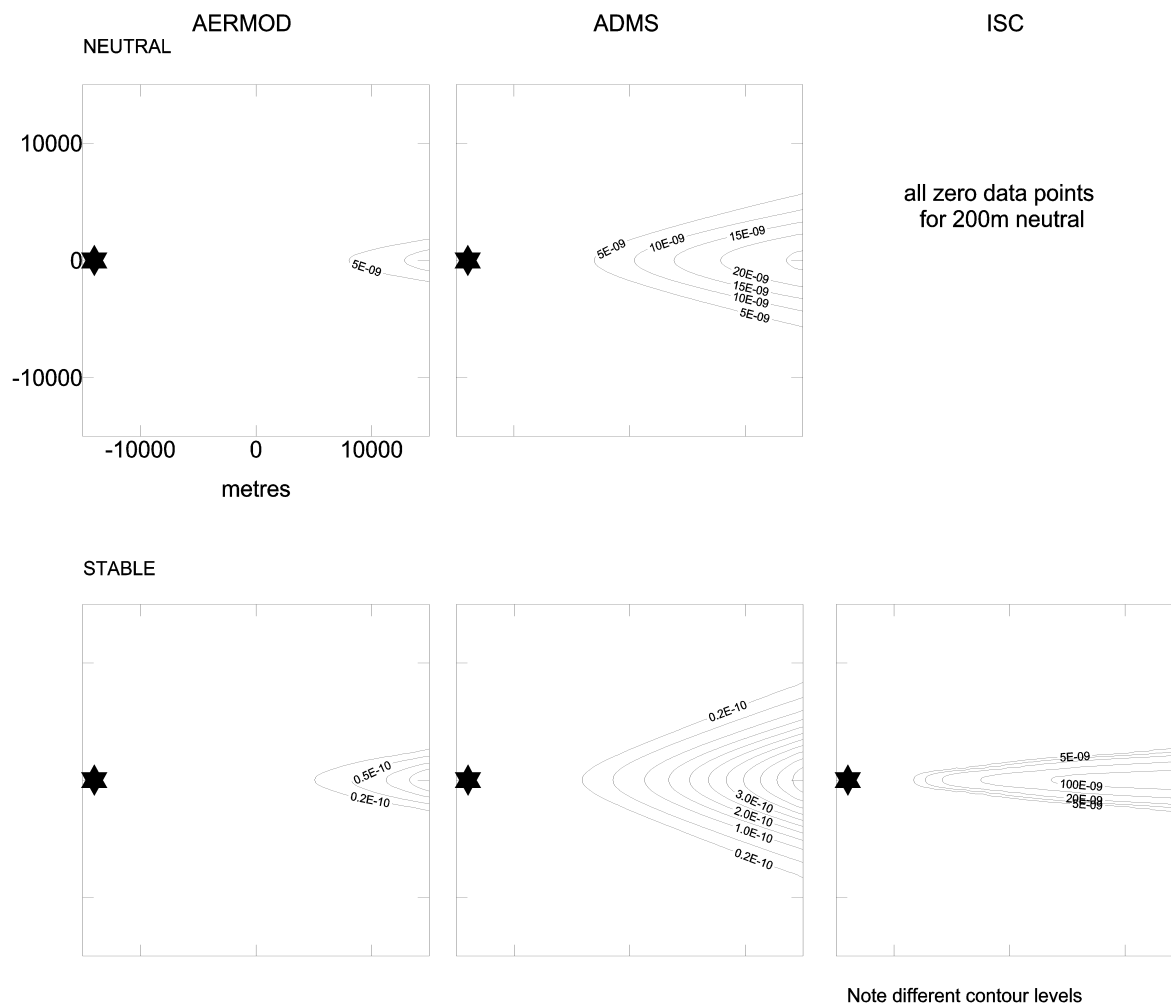


Figure 14. Plume interaction with 200m deep boundary layer. Normalised ground level concentration contours. 150m stack discharge with buoyancy.

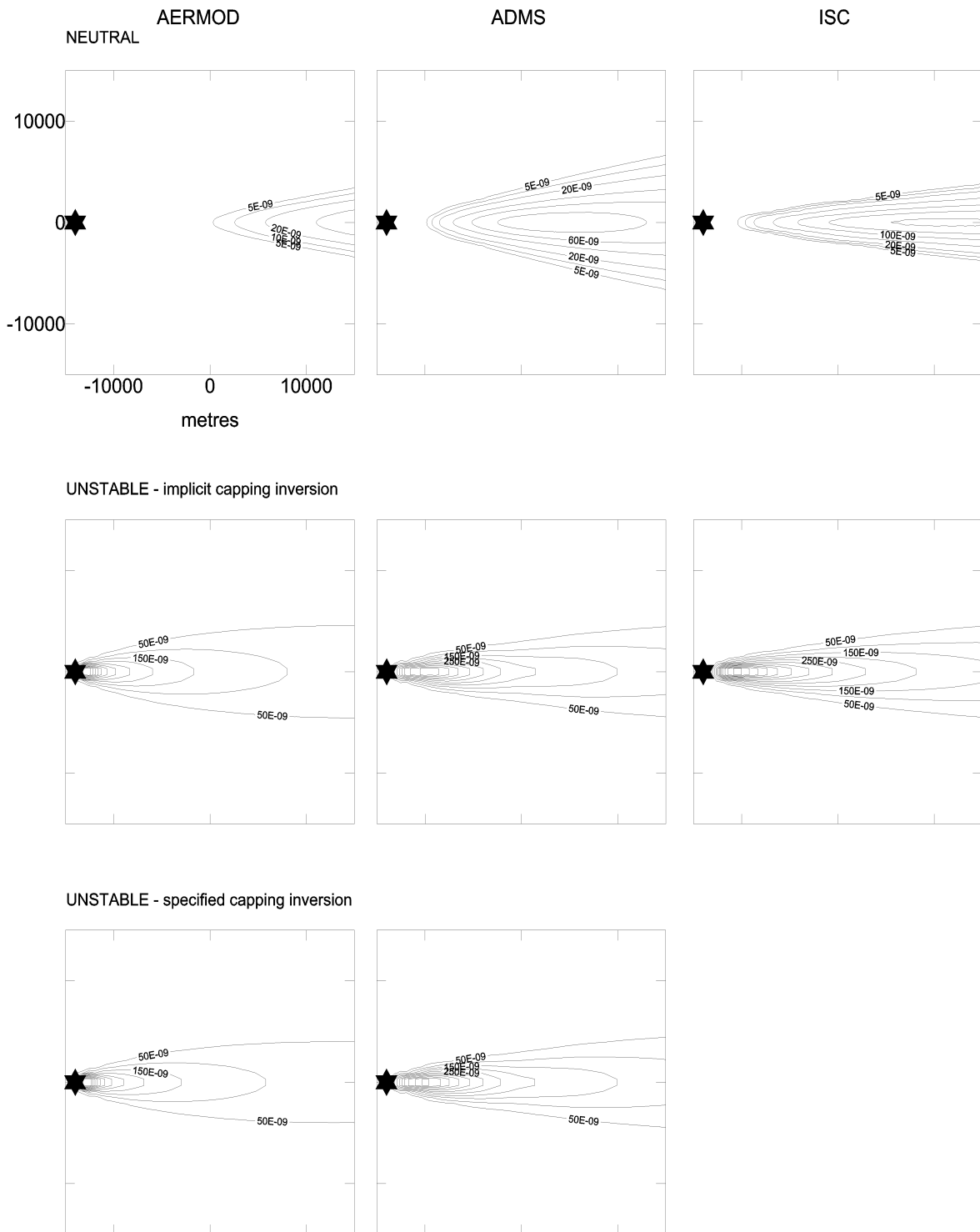


Figure 15. Plume interaction with 700m deep boundary layer. Normalised ground level concentration contours. 150m stack discharge with buoyancy.

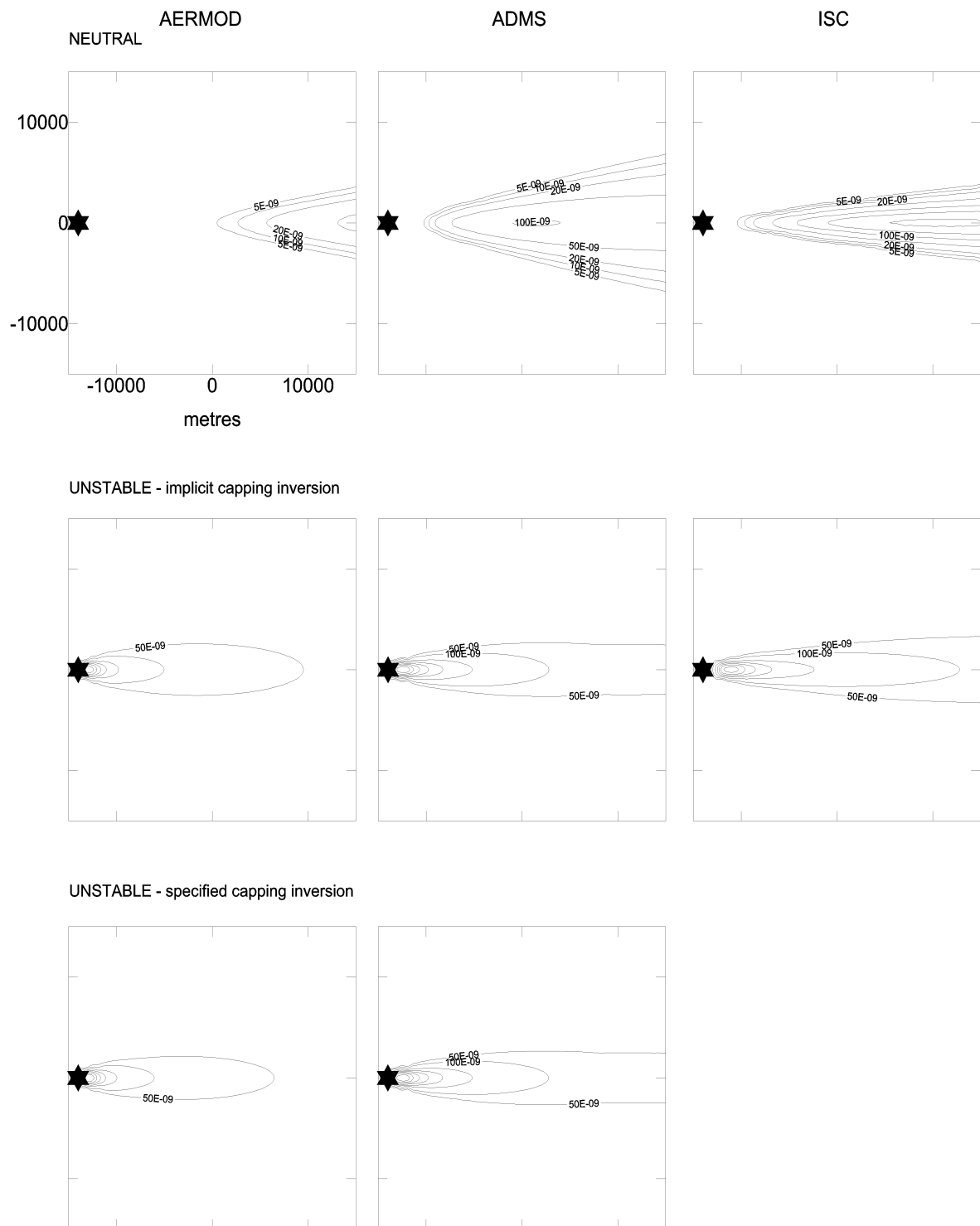


Figure 16. Plume interaction with 1200m deep boundary layer. Normalised ground level concentration contours. 150m stack discharge with buoyancy.

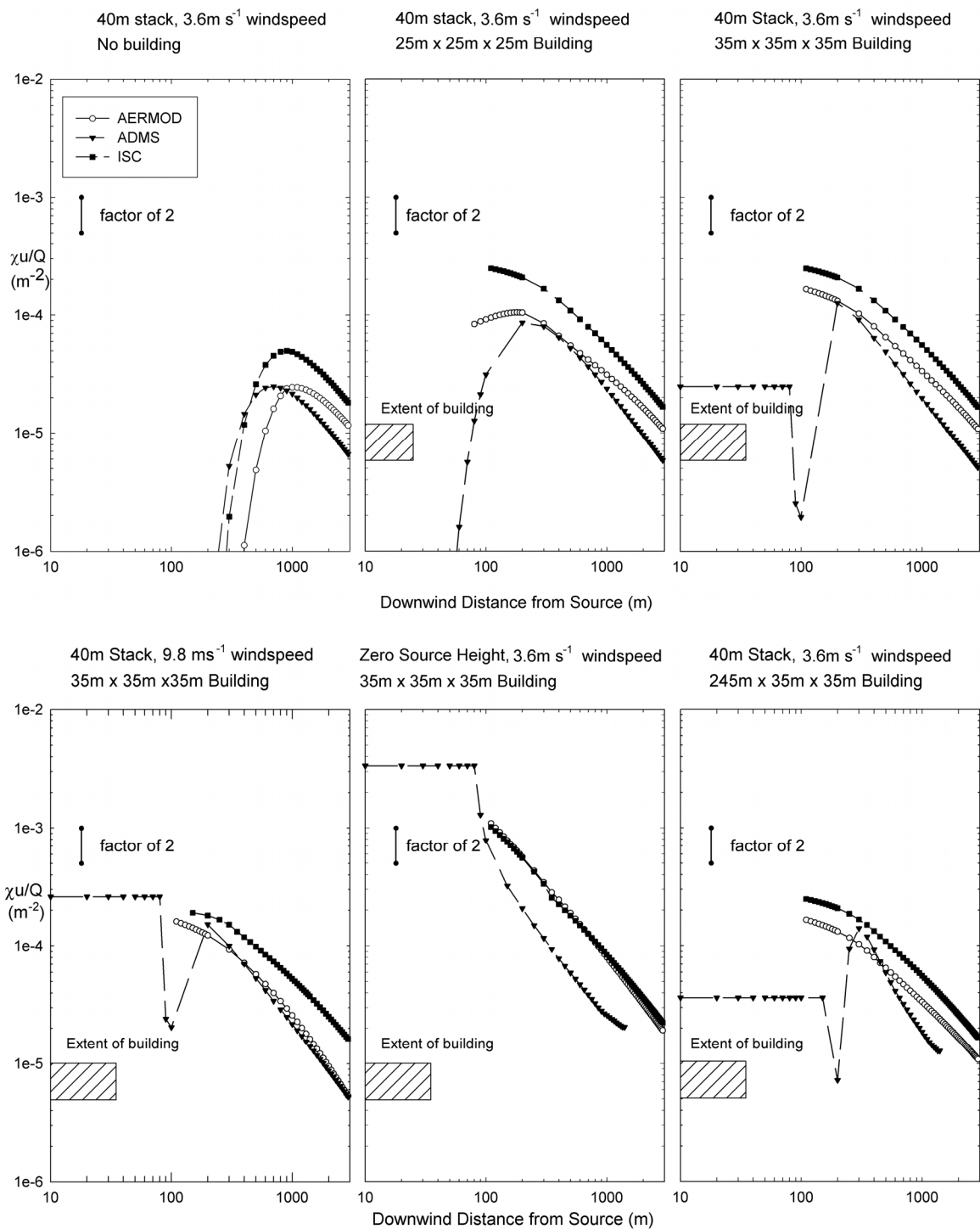
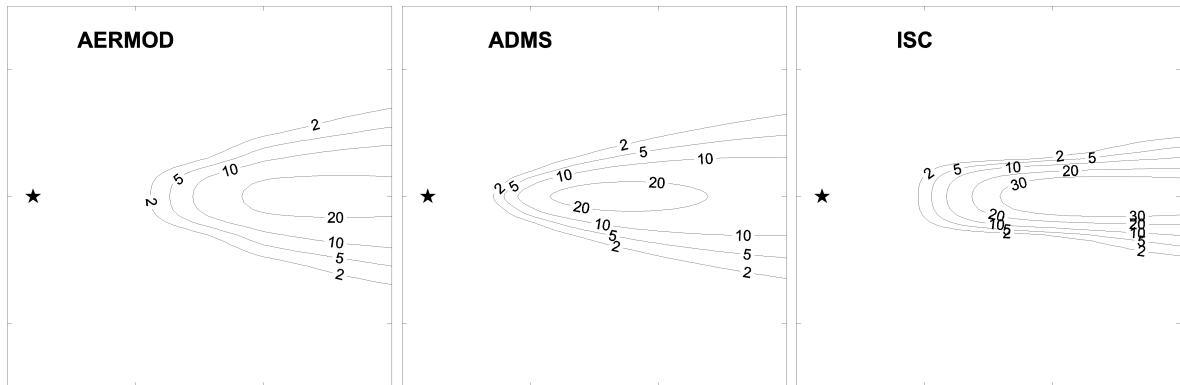
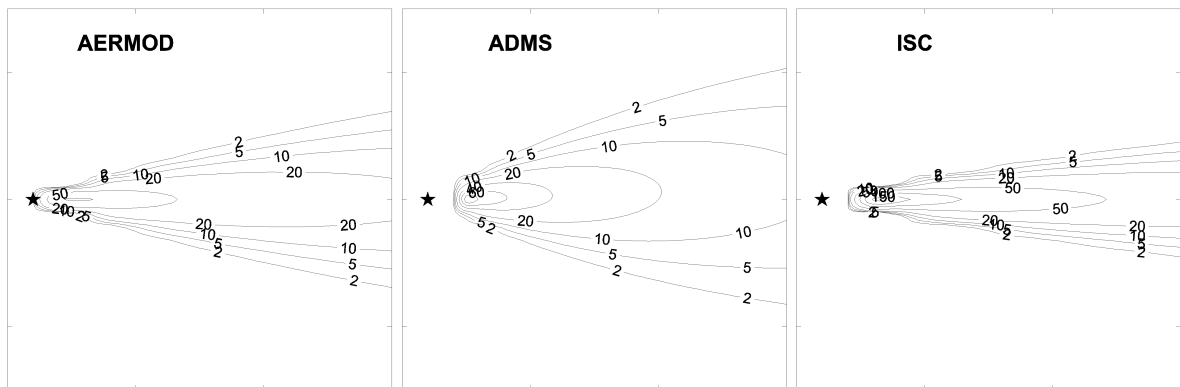


Figure 17. Effects of building entrainment for single conditions. Normalised ground level plume centreline concentrations. Neutral stability.

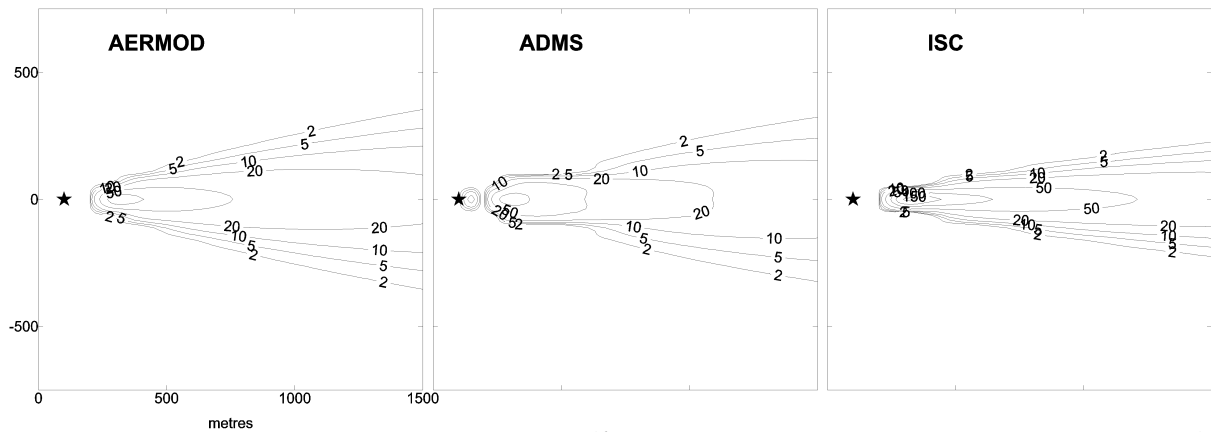
40m stack, 3.6m/s windspeed, No building



40m stack, 3.6m/s windspeed, 25m x 25m x 25m building



40m stack, 3.6m/s windspeed, 35m x 35m x 35m building

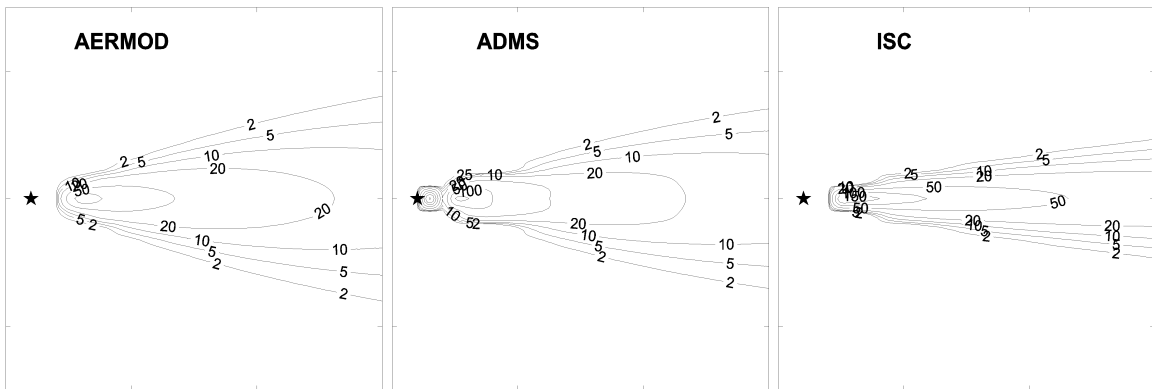


(Contours labelled as non-dimensionalised values x 1,000,000)

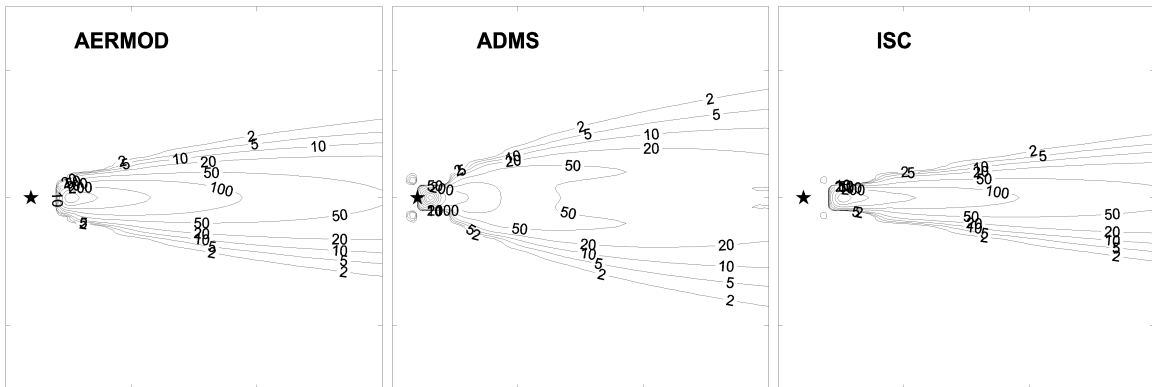
Figure 18(a). Effects of building entrainment.  
 Normalised ground level concentration contours.  
 Neutral stability.



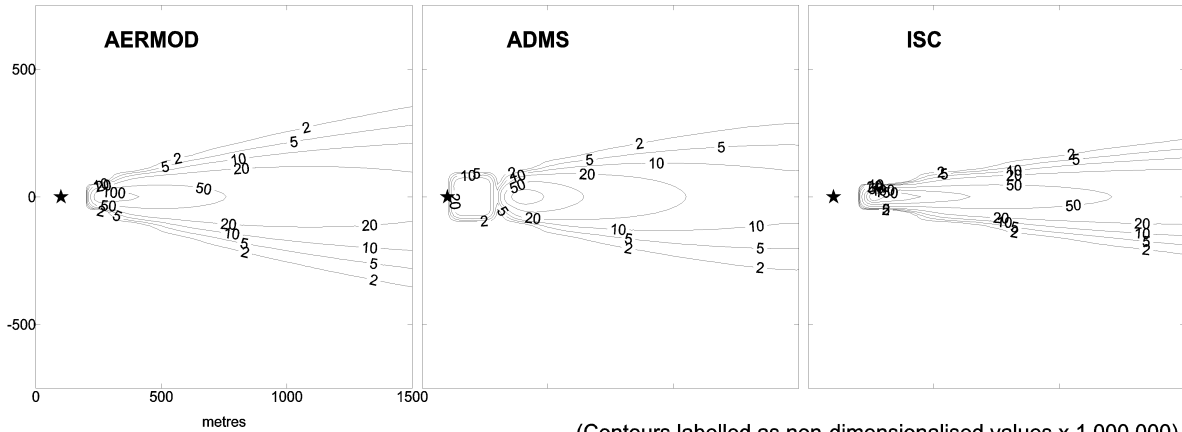
40m stack, 9.8m/s windspeed, 35m x 35m x35m building



Zero source height, 3.6m/s windspeed, 35m x 35m x 35m building



40m stack, 3.6m/s windspeed, 245m x 35m x 35m building



(Contours labelled as non-dimensionalised values x 1,000,000)

Figure 18(b). Effects of building entrainment.  
 Normalised ground level concentration contours.  
 Neutral stability.

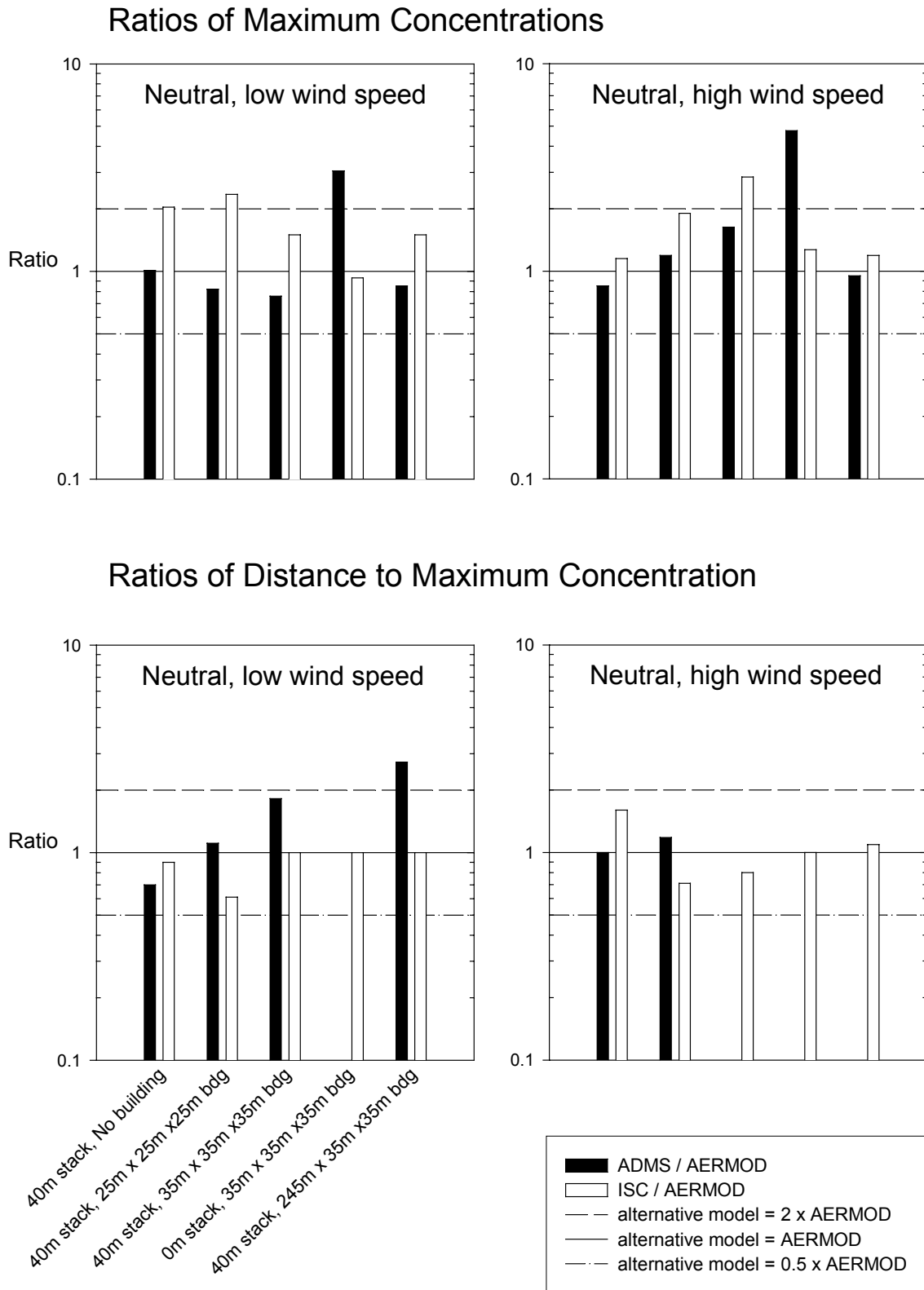


Figure 19. Effects of building entrainment. Bar charts of maximum concentration and their distances from the source. Ratios of values relative to AERMOD.

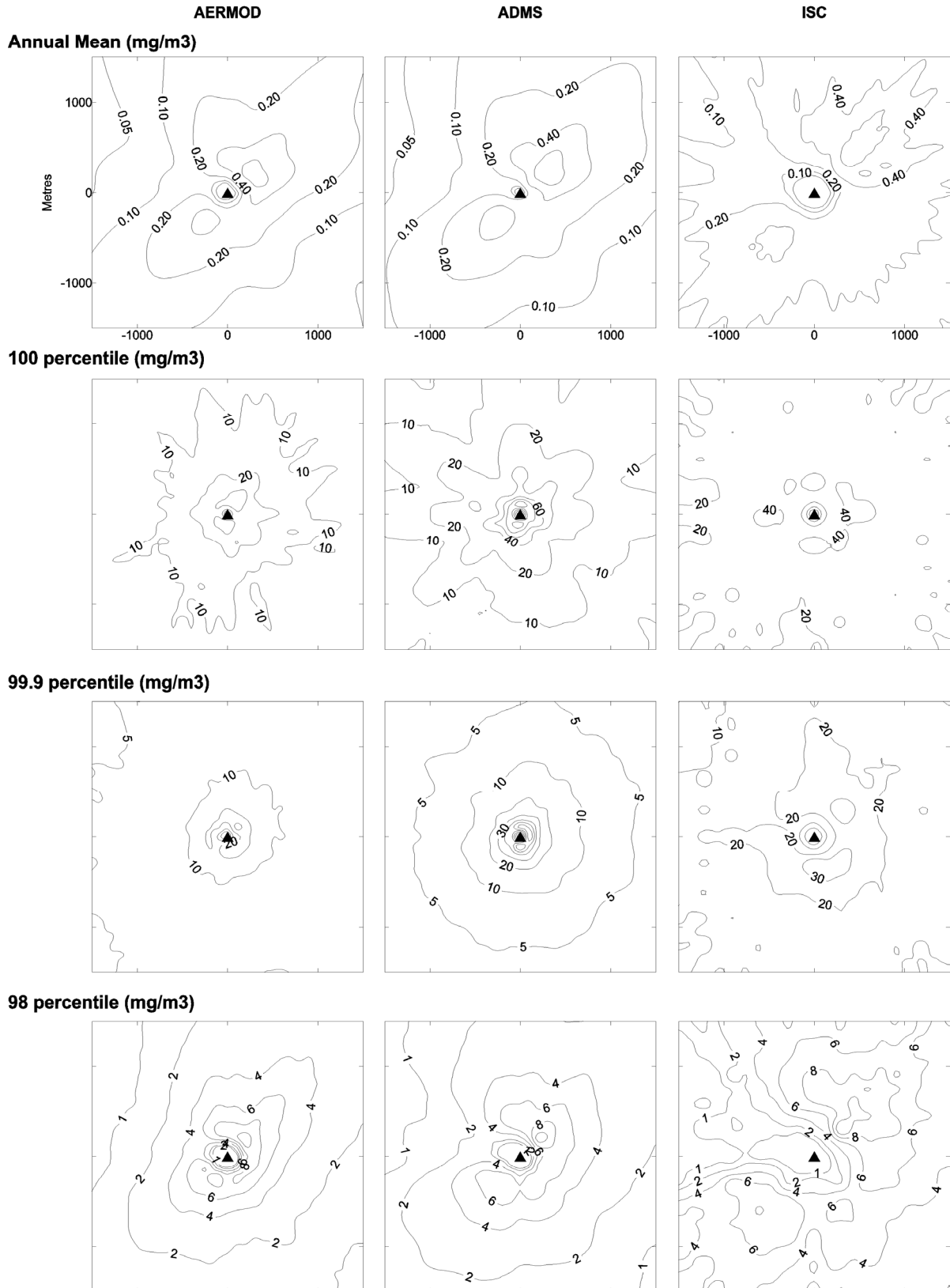


Figure 20. Annual statistics: ground level concentration patterns. 40m stack discharge, no buoyancy.