

Figure 21. Annual statistics: ground level concentration patterns.
 40m stack discharge with 35m cubical building, no buoyancy.

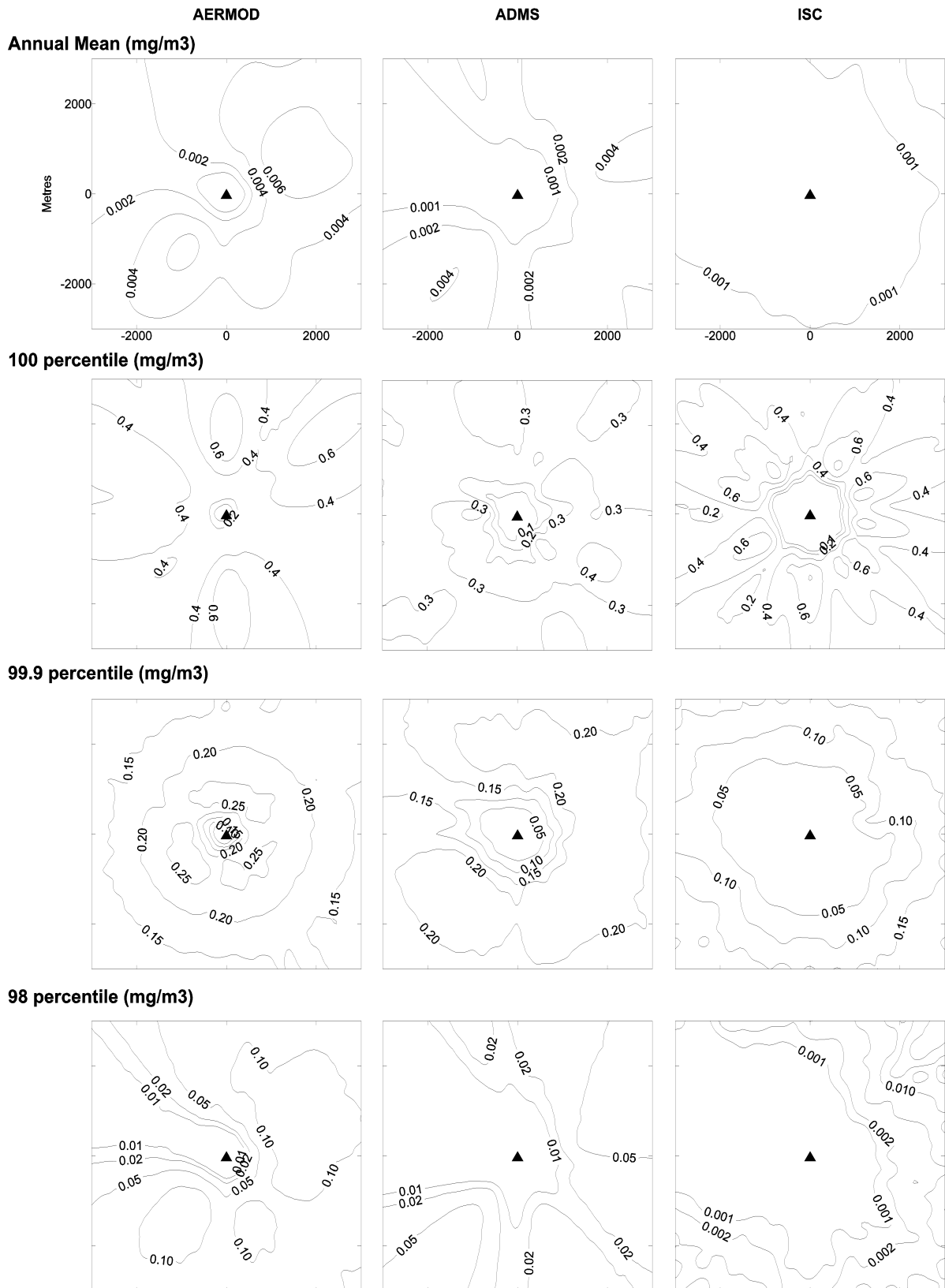


Figure 22. Annual statistics: ground level concentration patterns. 150m stack discharge with buoyancy.

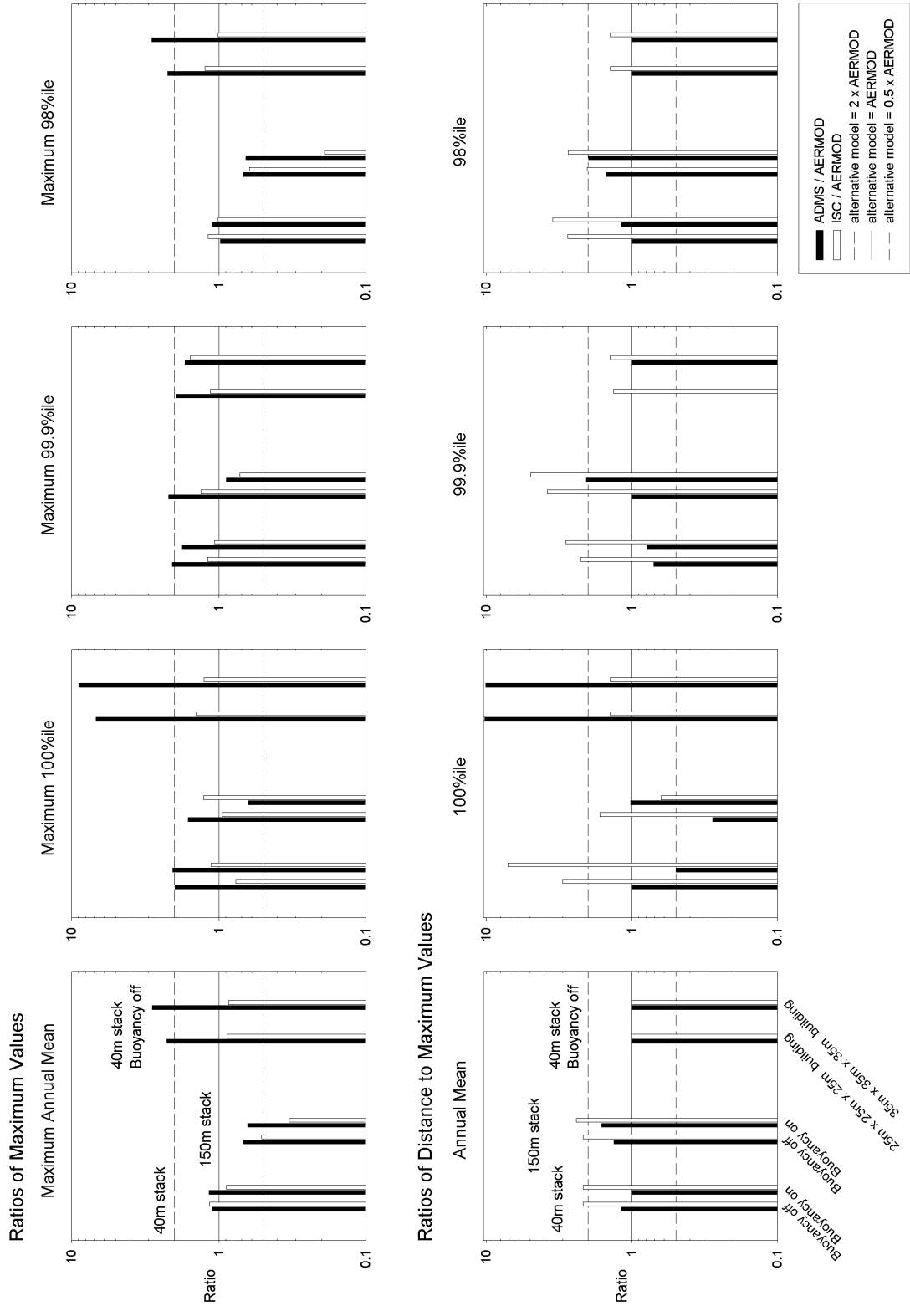
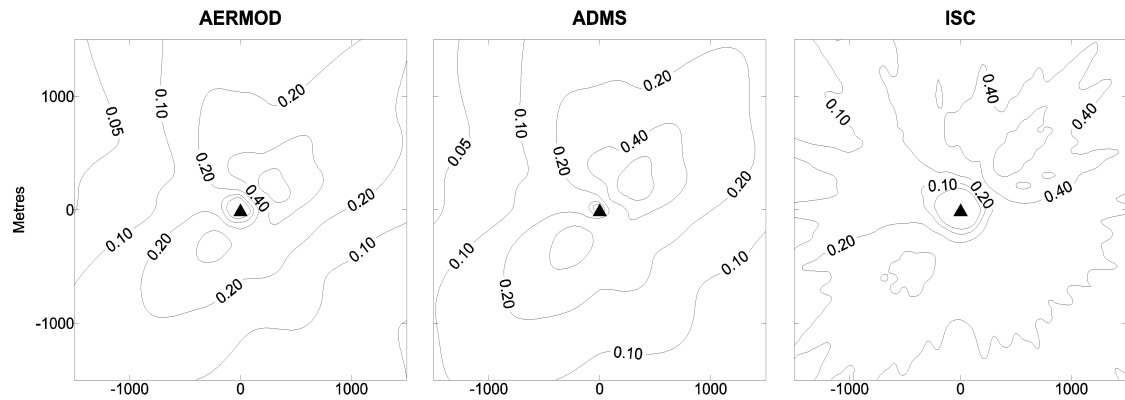
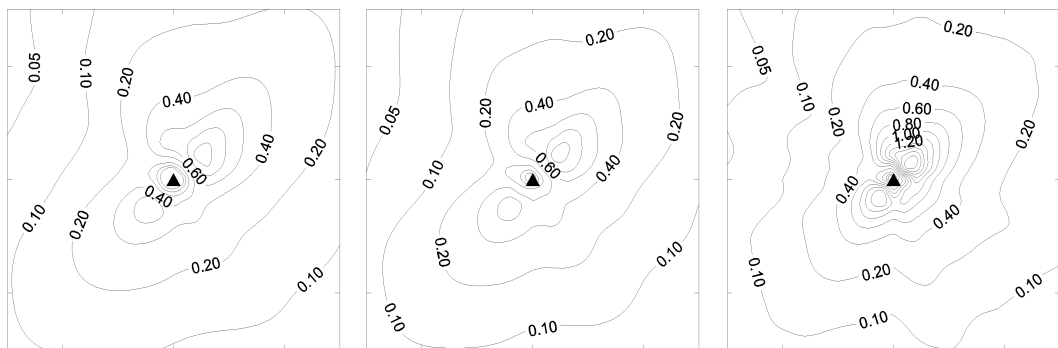


Figure 23. Annual statistics: ground level concentration and their distances from the source. Bar charts of maximum concentration and their distances from the source. Ratios of values relative to AERMOD.

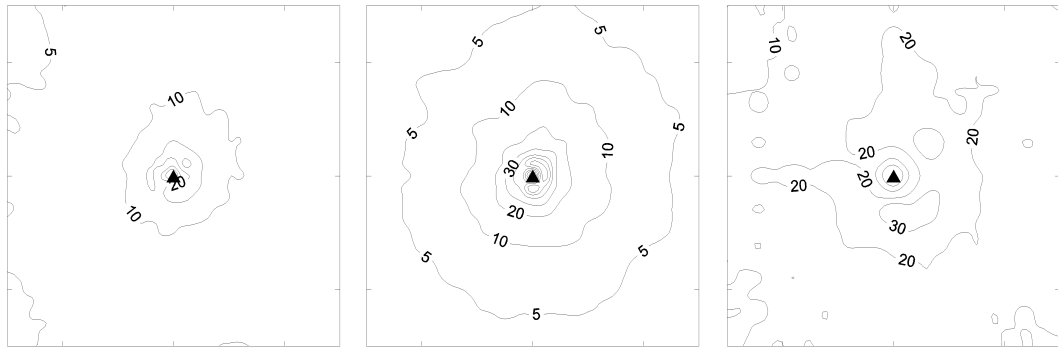
Roughness length = 0.1m (ISC - rural), Annual Mean (mg/m3)



Roughness length = 0.5m (ISC - urban), Annual Mean (mg/m3)



Roughness length = 0.1m (ISC - rural), 99.9 percentile (mg/m3)



Roughness length = 0.5m (ISC - urban), 99.9 percentile (mg/m3)

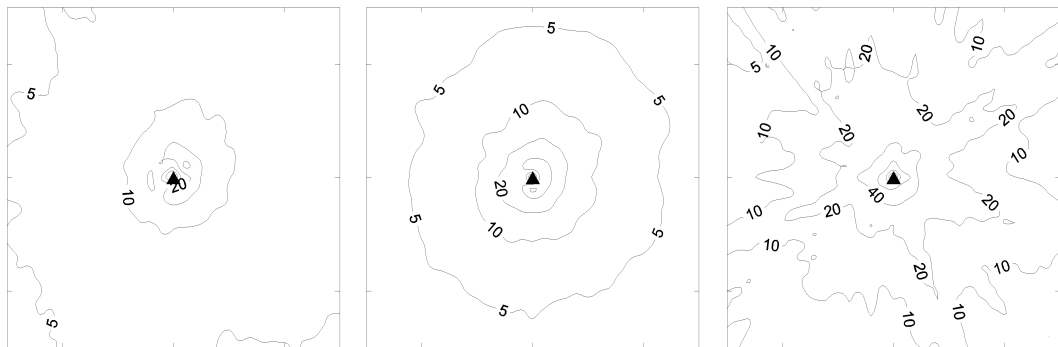
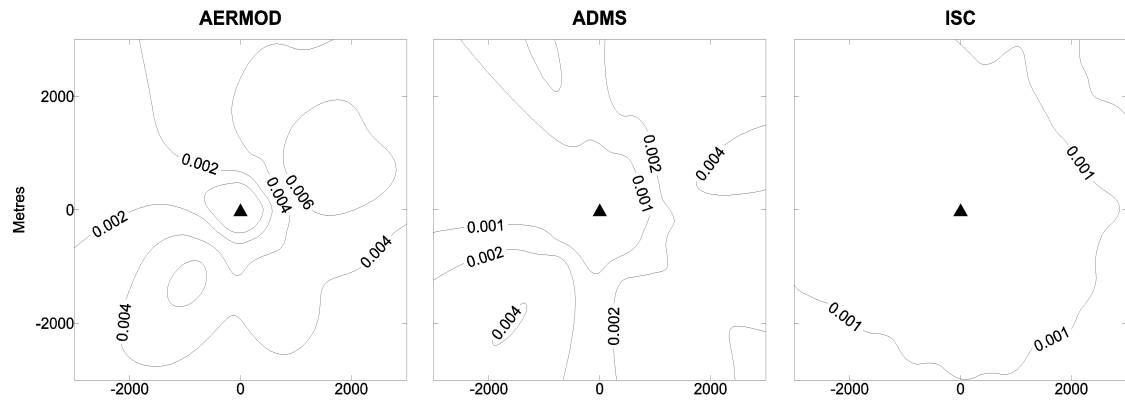
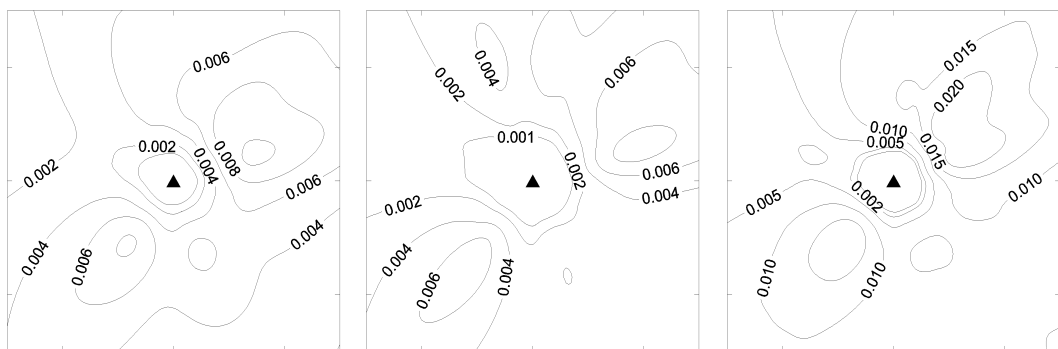


Figure 24. Effect of surface roughness on annual calculations.
Discharge at 40m height with no buoyancy.

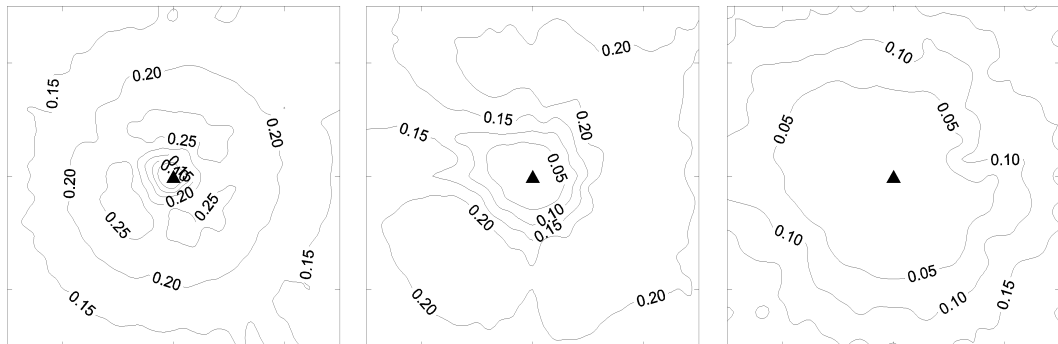
Roughness length = 0.1m (ISC - rural), Annual Mean (mg/m3)



Roughness length = 0.5m (ISC - urban), Annual Mean (mg/m3)



Roughness length = 0.1m (ISC - rural), 99.9 percentile (mg/m3)



Roughness length = 0.5m (ISC - urban), 99.9 percentile (mg/m3)

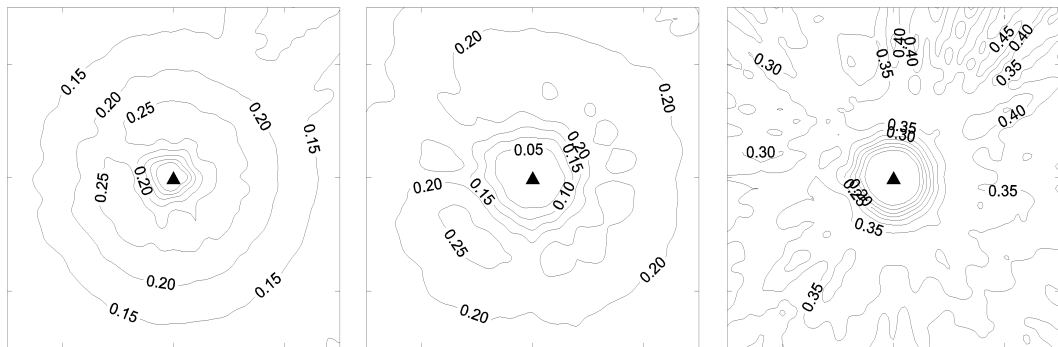


Figure 25. Effect of surface roughness on annual calculations. Discharge at 150m height with buoyancy.

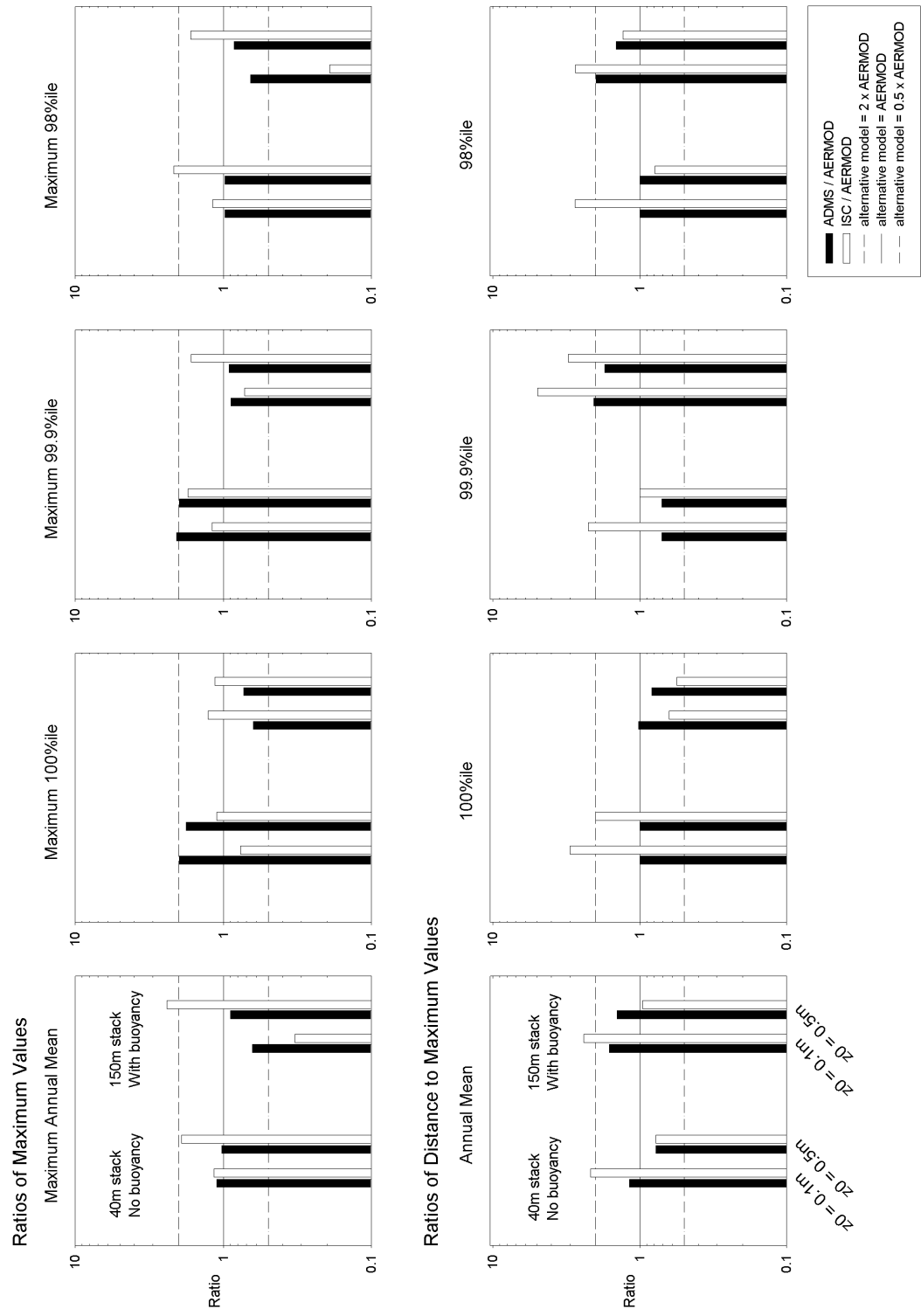


Figure 26. Effect of surface roughness on annual calculations. Bar charts of maximum concentration and their distances from the source. Ratios of values relative to AERMOD.

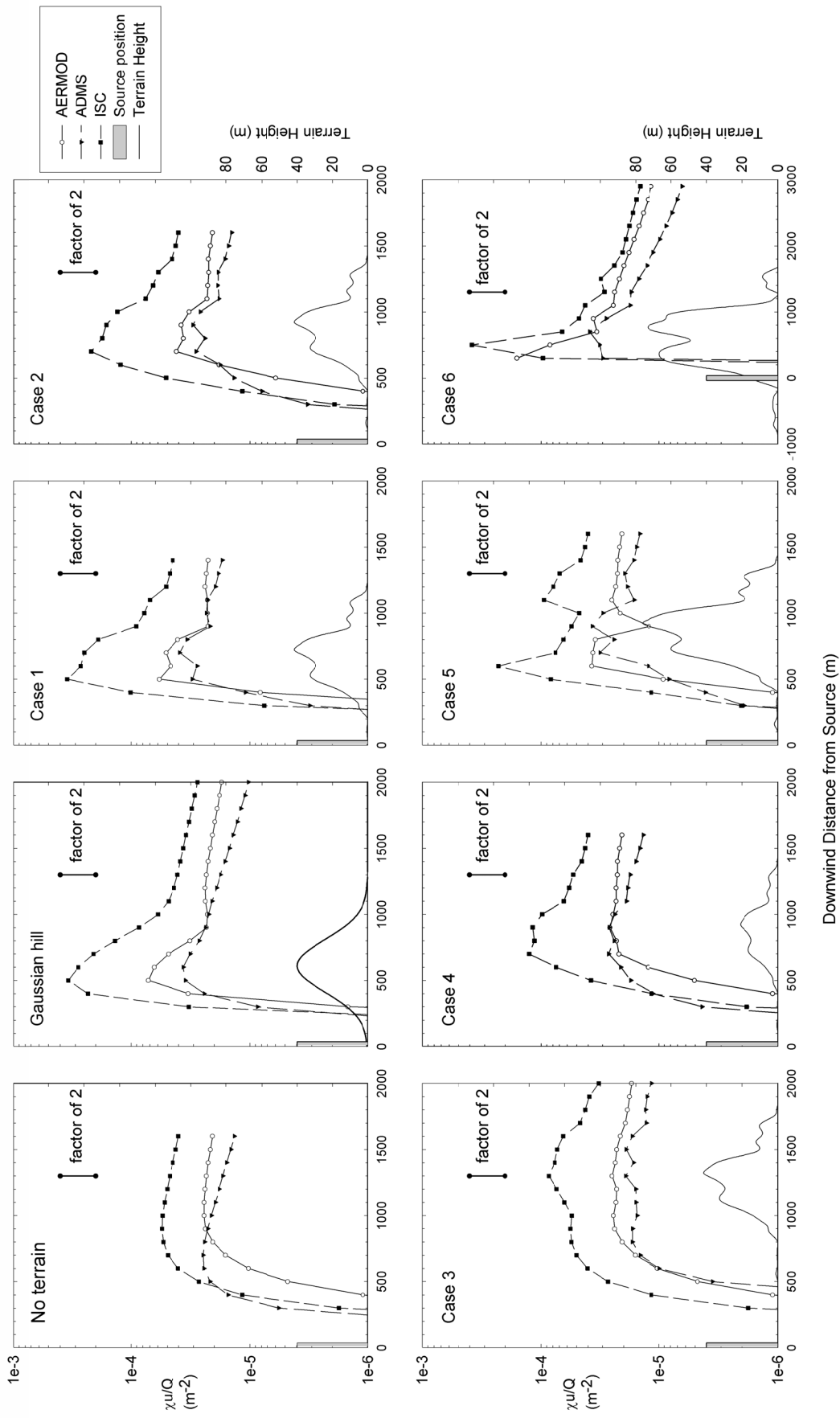


Figure 27. Effects of terrain.
 Basic dispersion rates for single conditions.
 Normalised ground level centreline concentrations over all terrain cases in neutral stability.

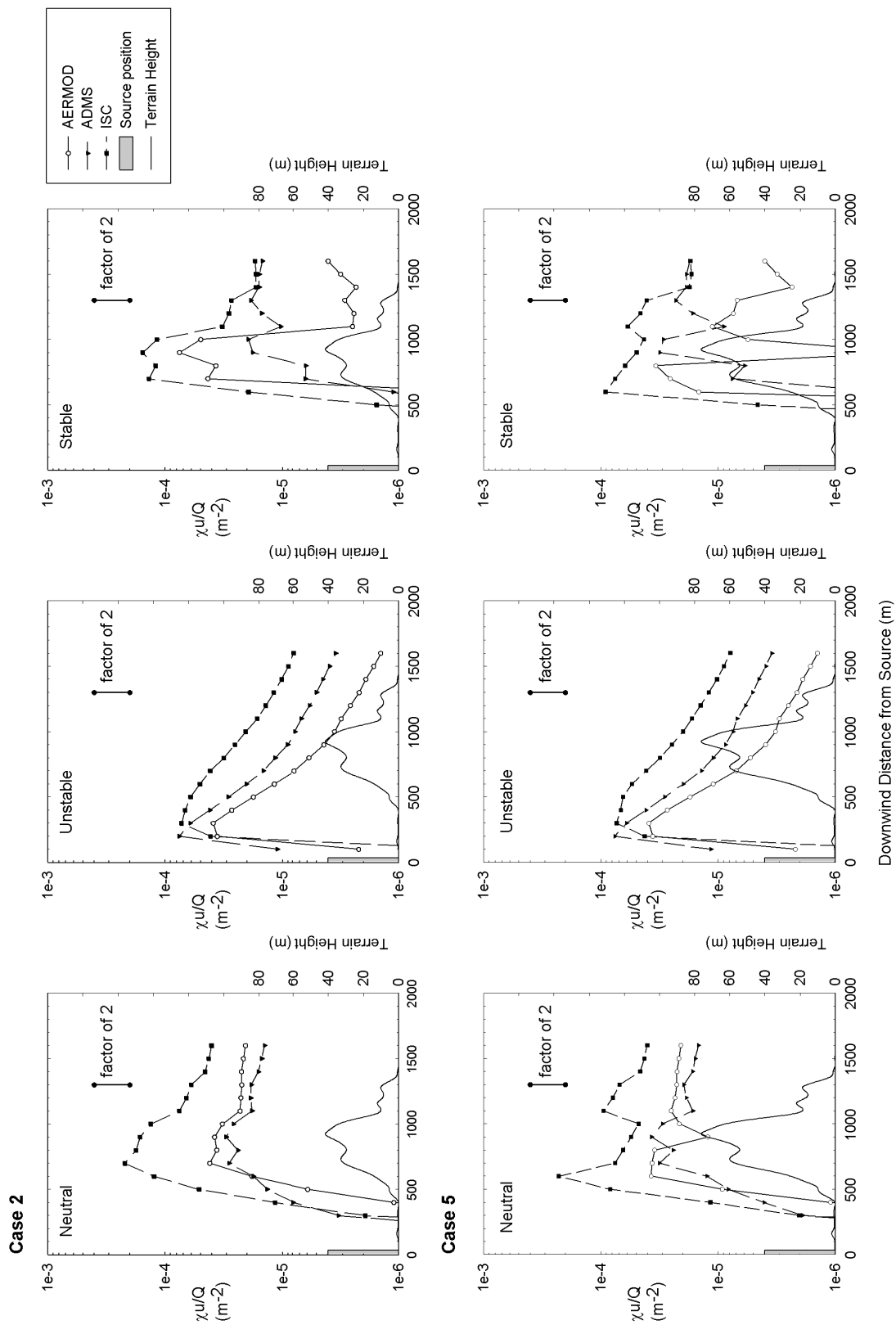
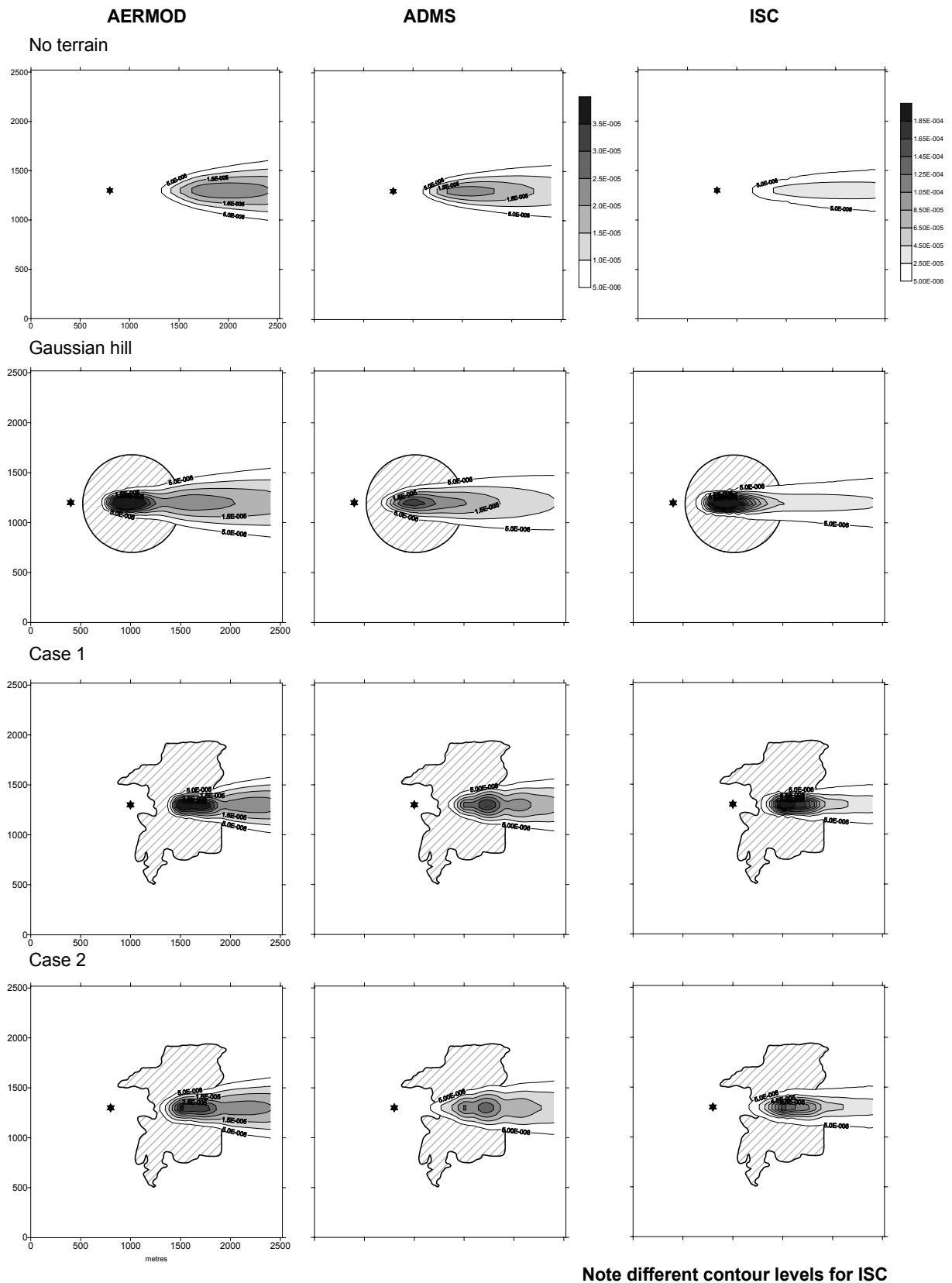
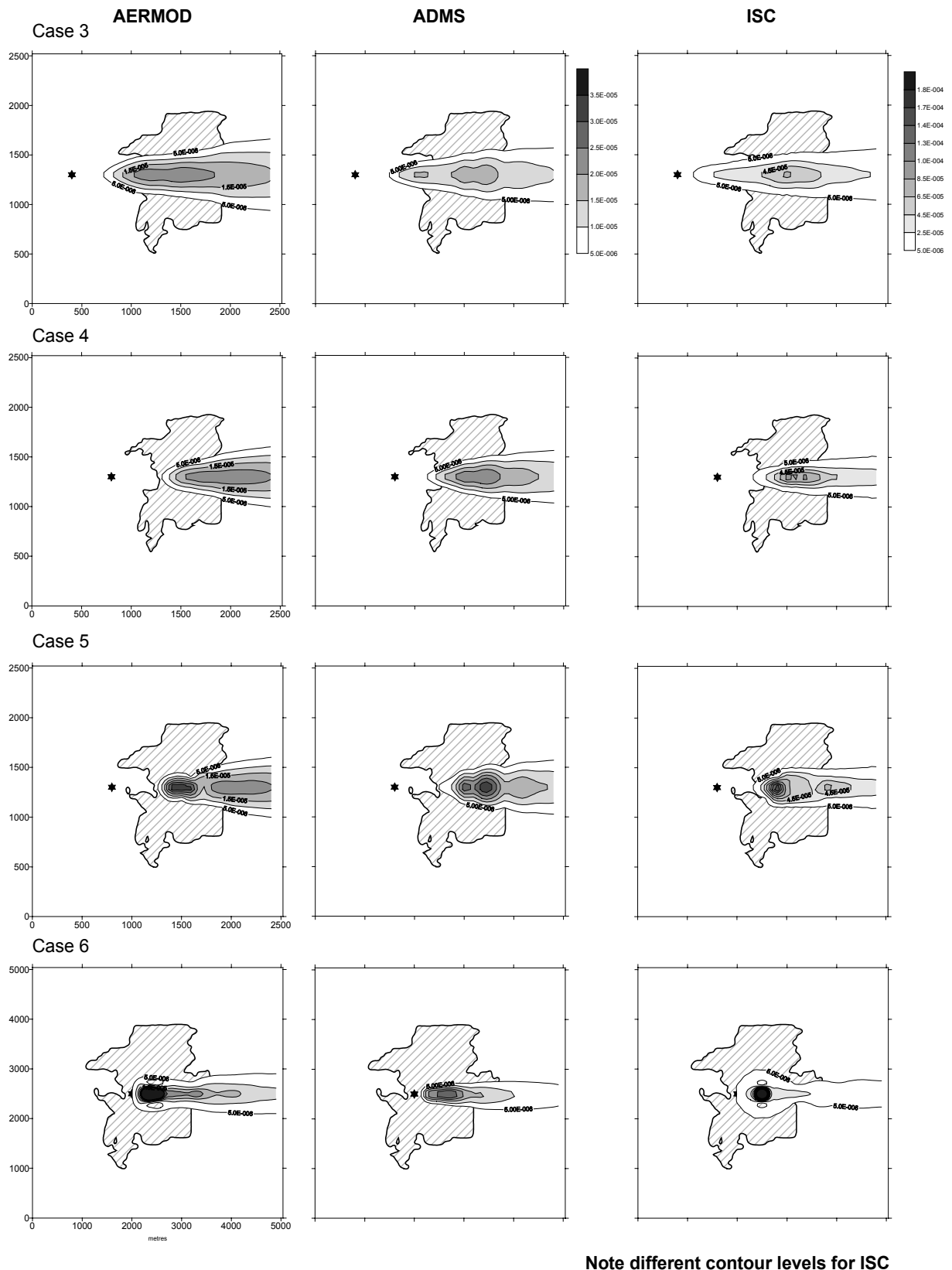


Figure 28. Effects of terrain.
 Basic dispersion rates for single conditions.
 Normalised ground level plume centreline concentrations over terrain cases 2 and 5 in all stabilities.



Note different contour levels for ISC

Figure 29(a). Effects of terrain.
 Basic dispersion rates for single conditions.
 Normalised ground level plume concentration contours over all terrain cases in neutral stability.



Note different contour levels for ISC

Figure 29(b). Effects of terrain.
 Basic dispersion rates for single conditions.
 Normalised ground level plume concentration contours over all terrain cases in neutral stability.

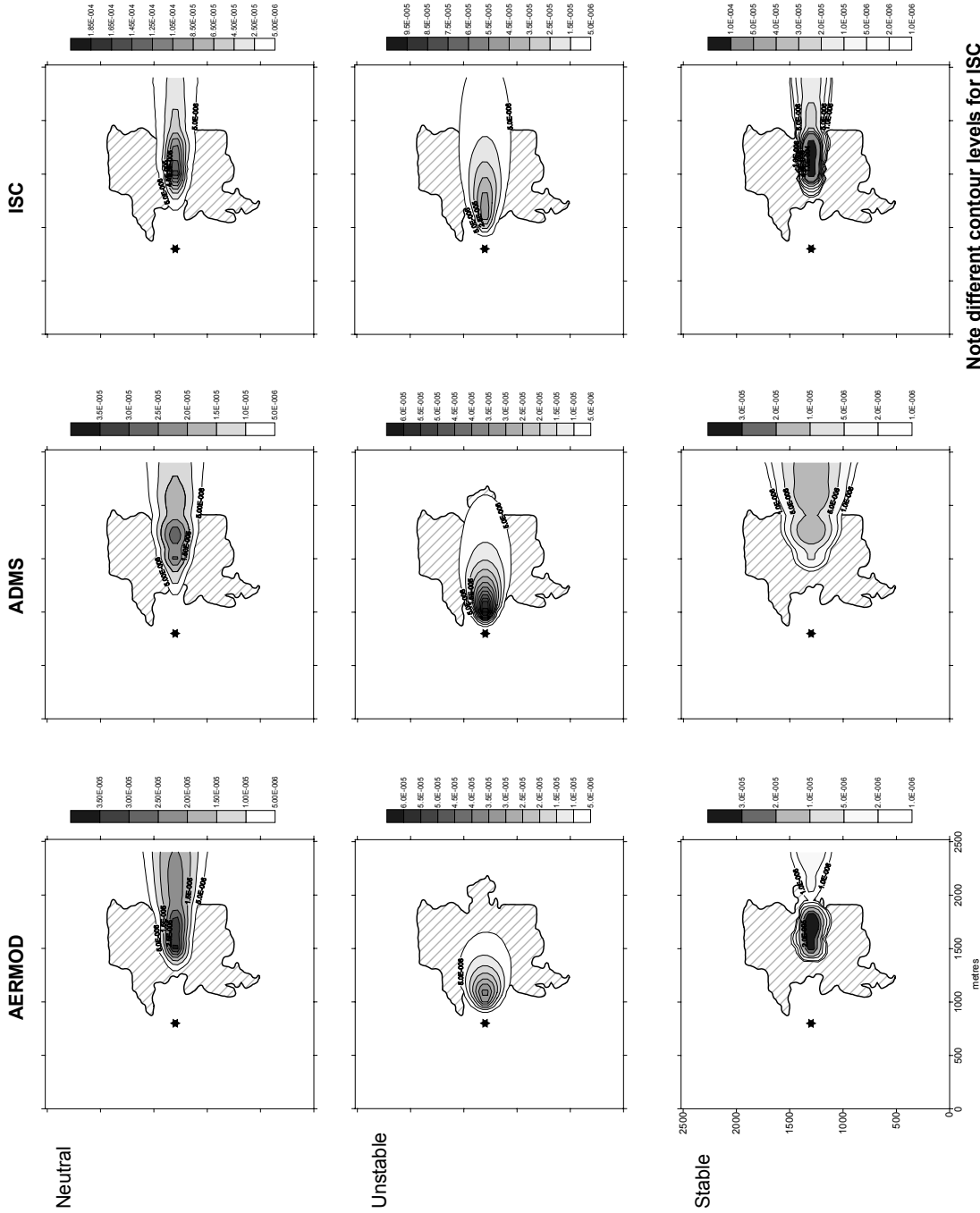


Figure 30. Effects of terrain.
 Basic dispersion rates for single conditions.
 Normalised ground level plume concentration contours for terrain case 2 in all stabilities.