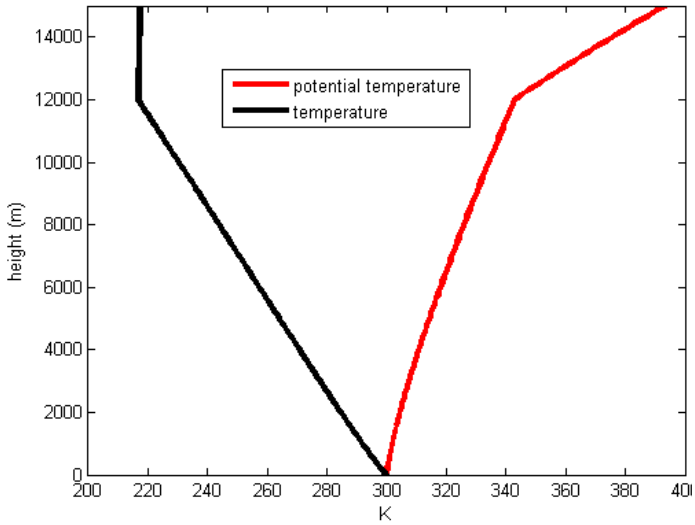
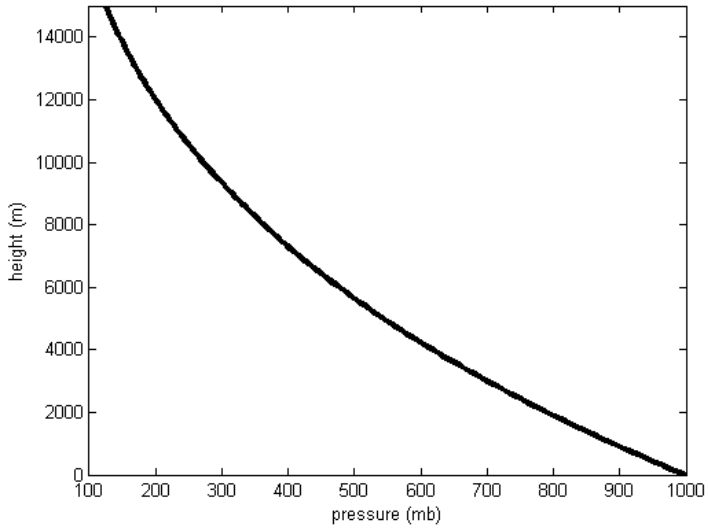
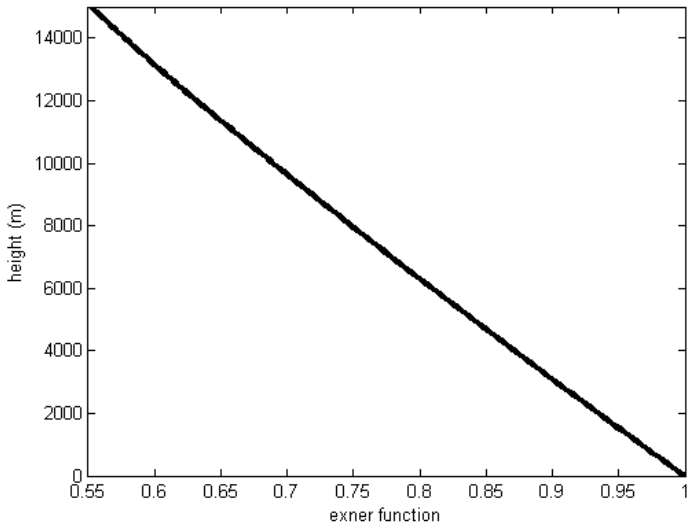
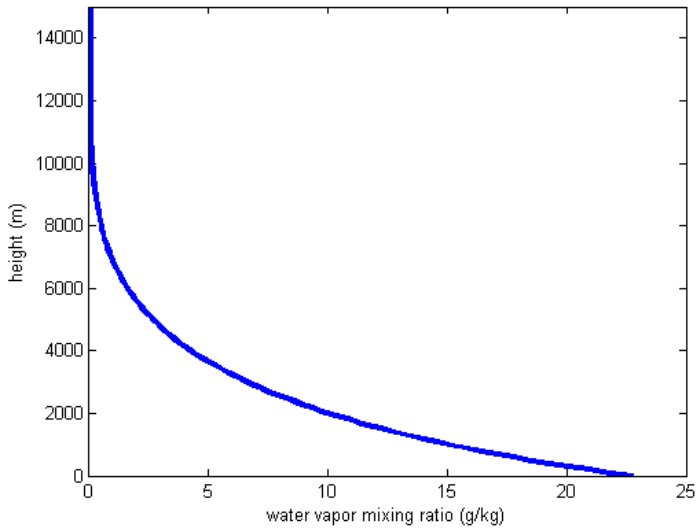
1. Environmental Conditions

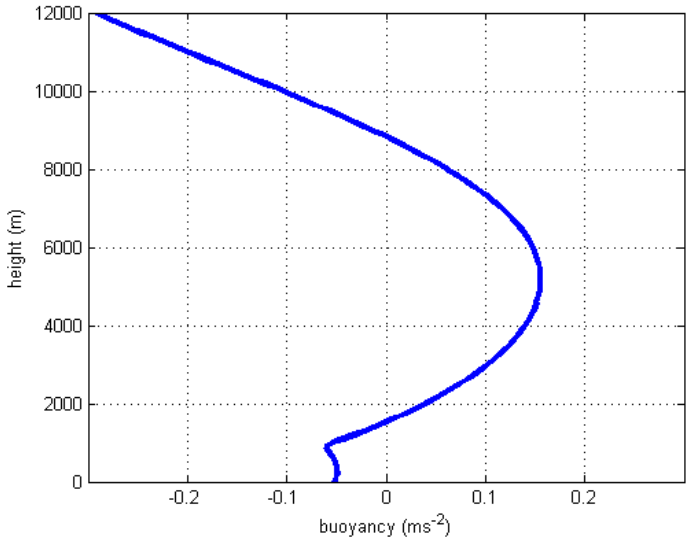


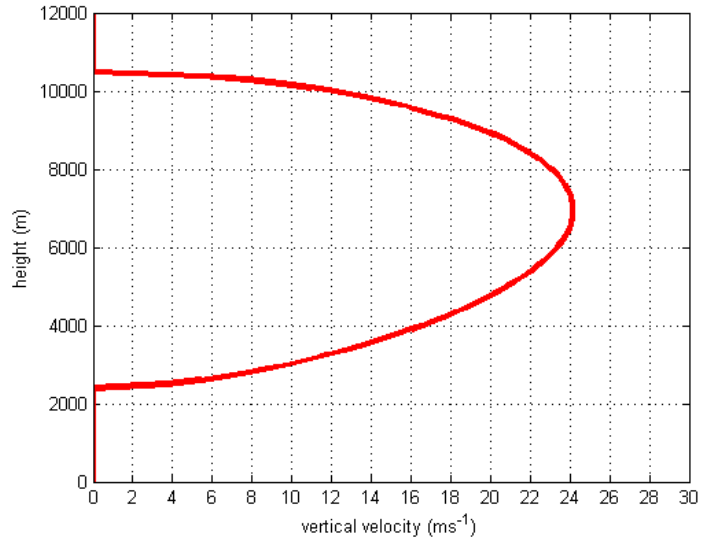




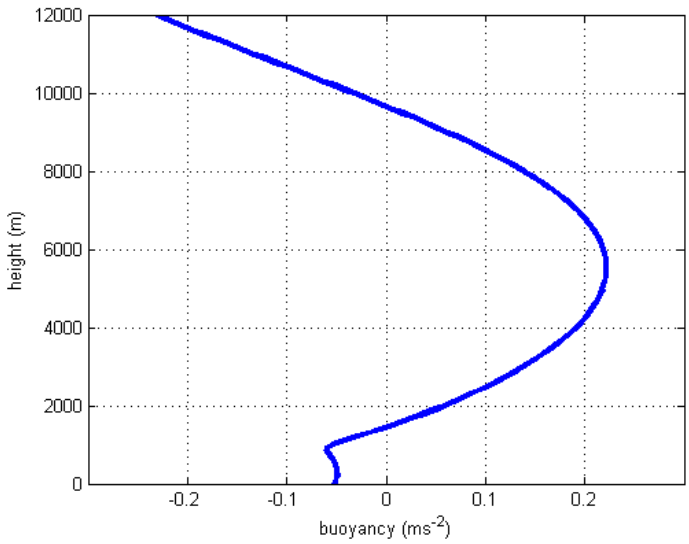


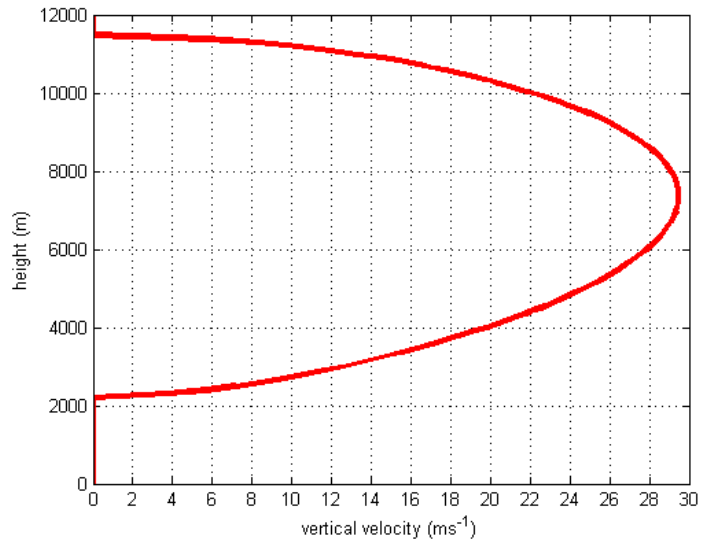
6. a) Reversible, lambda = .1 km^{-1}



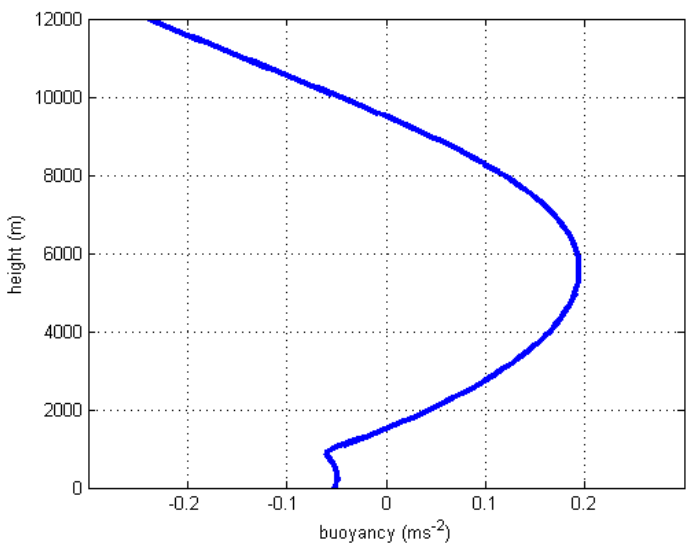


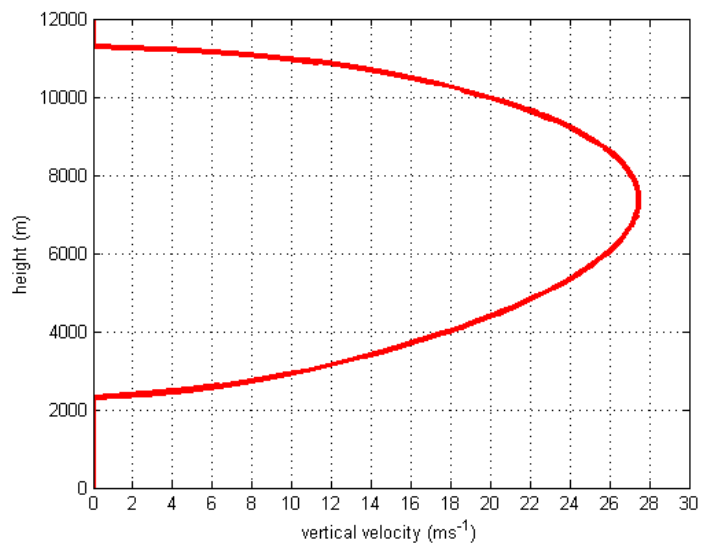
b) Irreversible, lambda = .1 km^{-1}, C = 2 km^{-1}





c) Irreversible, lambda = .1 km^{-1}, C = .15 km^{-1}





6. d)

In the reversible example (a), buoyance (LNB and max buoyancy) and max vertical velocity are reduced in comparison to the irreversible examples. Based off of the two values used for C (.15 and 2 km-1), it would appear that the LNB and max vertical velocity increase with C. Thus, as more liquid is removed from the parcel, the parcel becomes more buoyant and obtains a larger vertical velocity.

7.	LNB [m]	max(w) [ms-1]
a)	8800	24.16
b)	6400	13.29
c)	8700	22.42
d)	6100	9.07
e)		

The inclusion of entrainment in the parcel model appears to reduce vertical velocity and the LNB. As the environmental relative humidity is increased, the LNB and vertical velocity are increased.