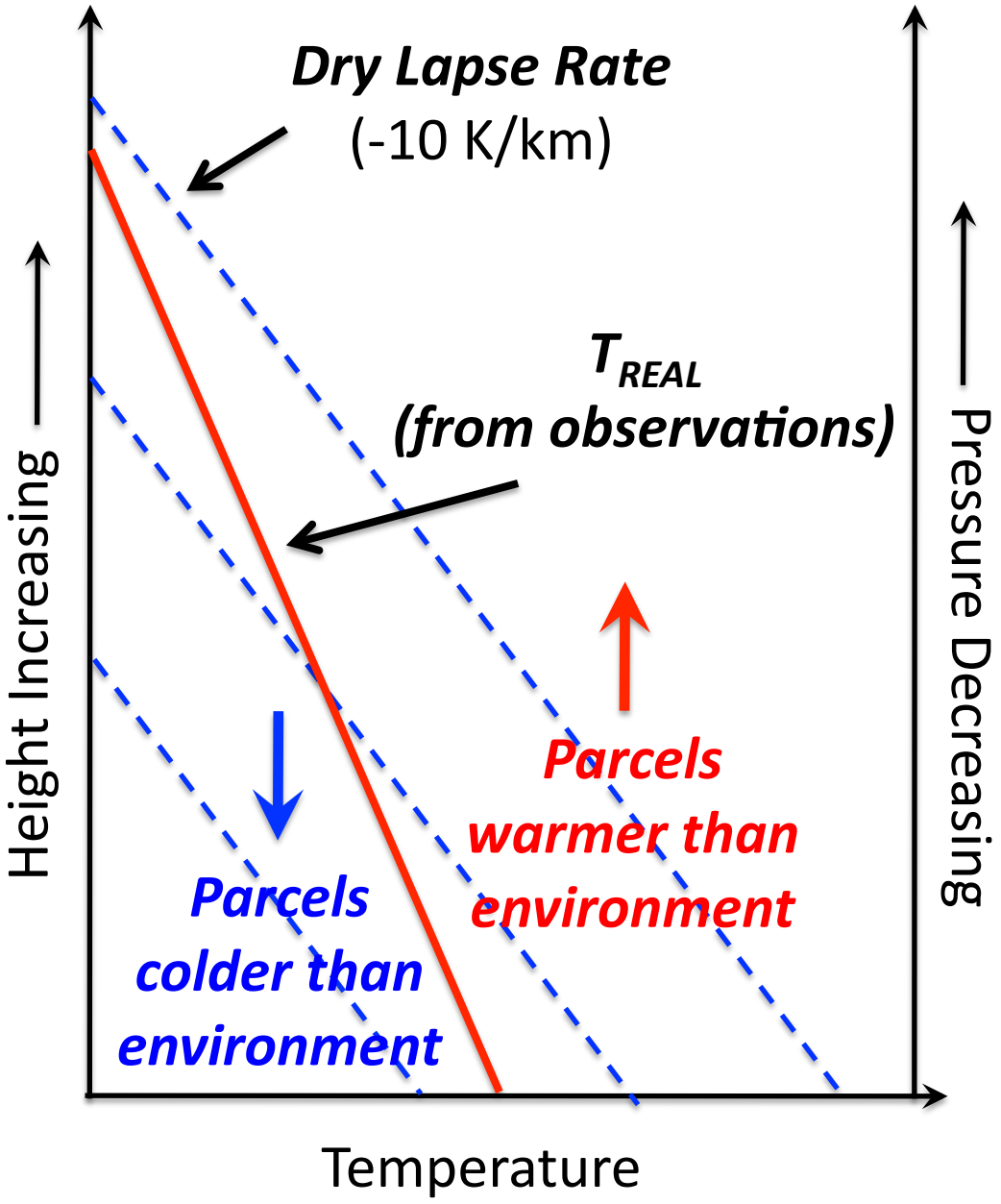
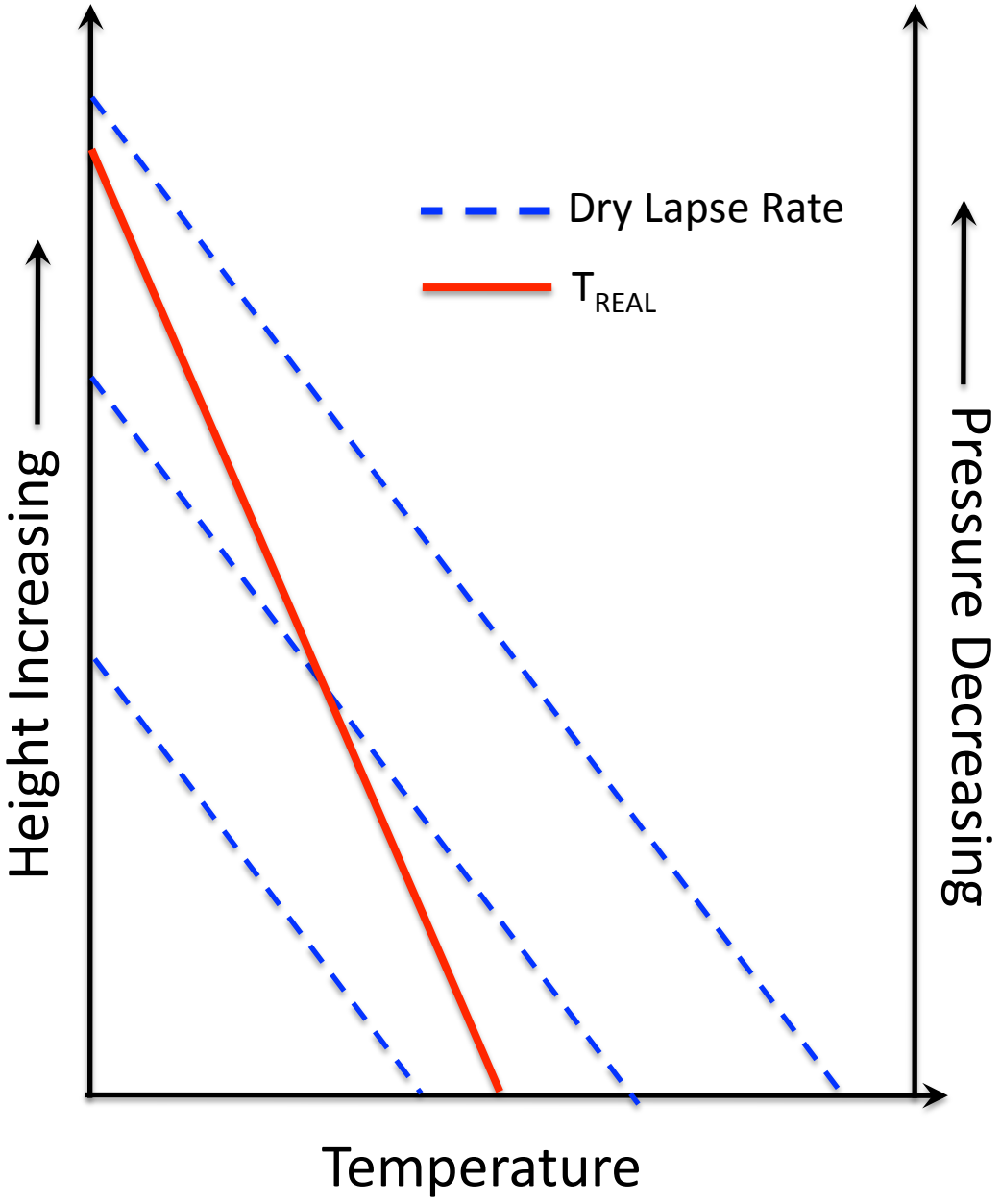
Determining Stability from Profiles of Temperature (Extend Piece, Tue 7/12/11)



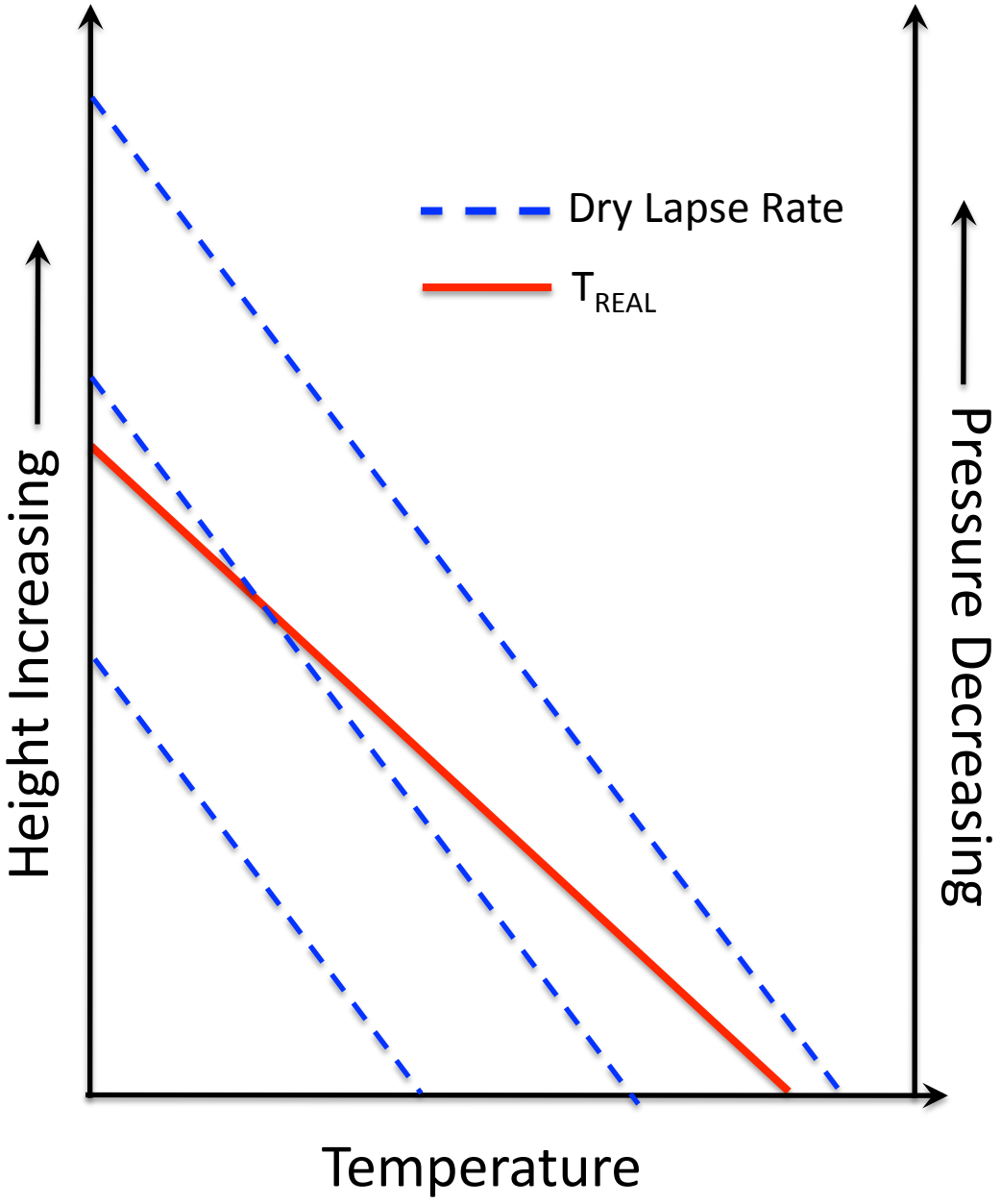
Determining Stability from Profiles of Temperature



Profile is _____

(stable, unstable, or neutral)

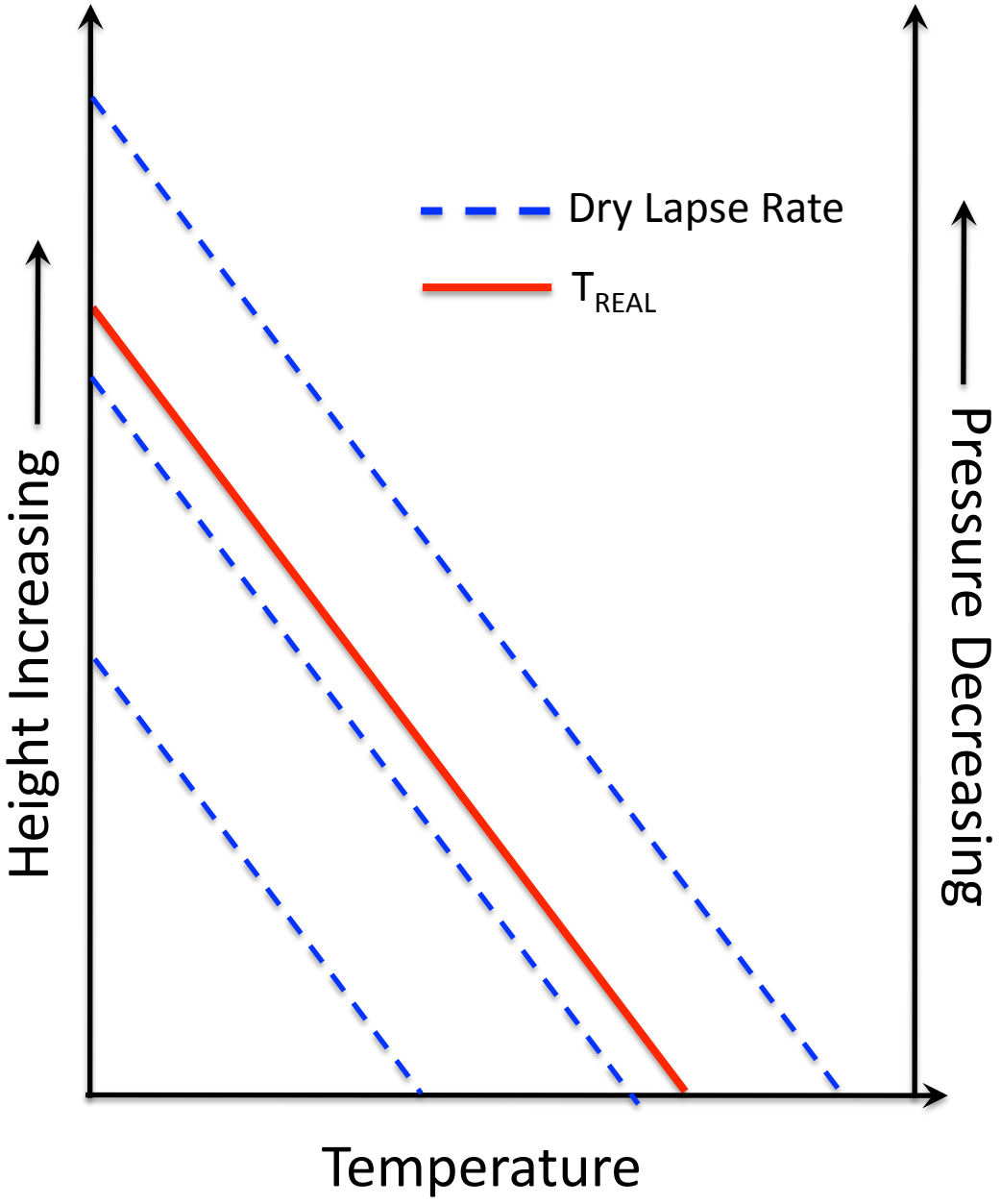
Determining Stability from Profiles of Temperature



Profile is _____

(stable, unstable, or neutral)

Determining Stability from Profiles of Temperature



Profile is _____

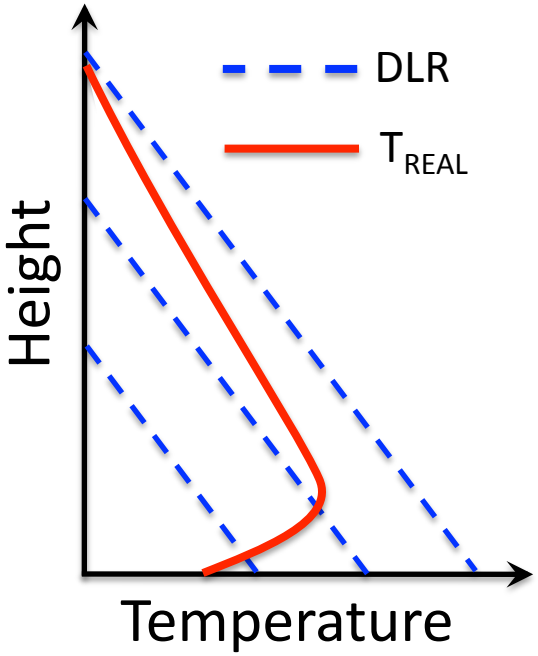
(stable, unstable, or neutral)

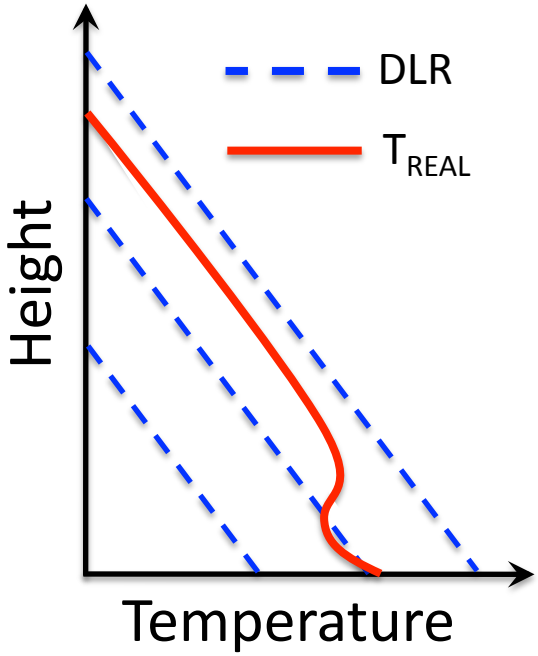
Profiles for Exercise 1

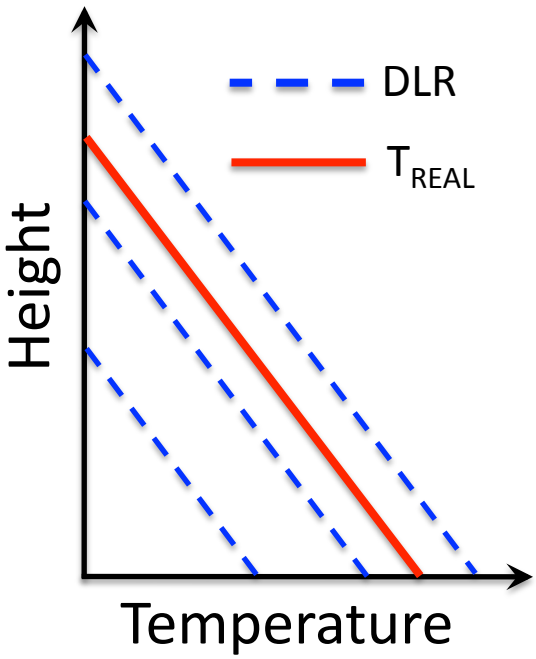
Step 1: Note the path taken by the smoke in the photos and match to the corresponding temperature profile.

Step 2: Draw a line on the profile corresponding to the "parcel path" of the smoke exiting the smokestack.

(Hint: assume smoke follows dry lapse rate.)







Exercise 1 Photos

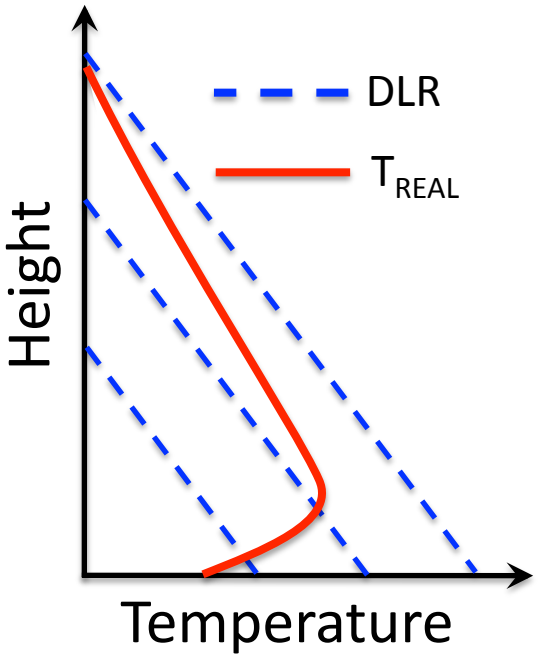
B

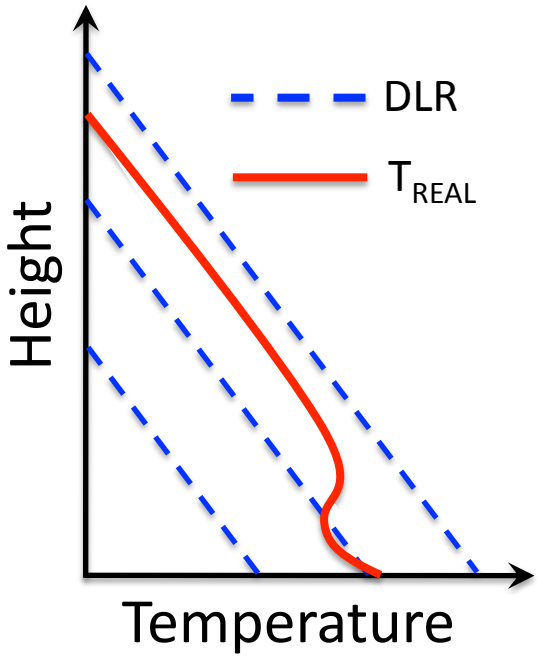
C

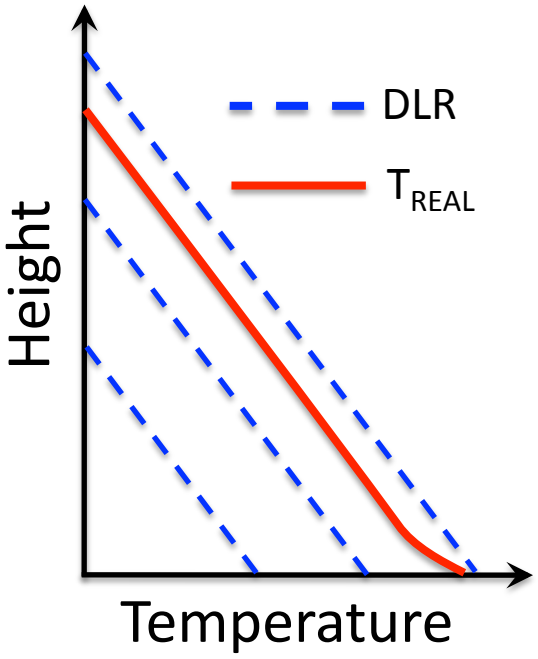
A

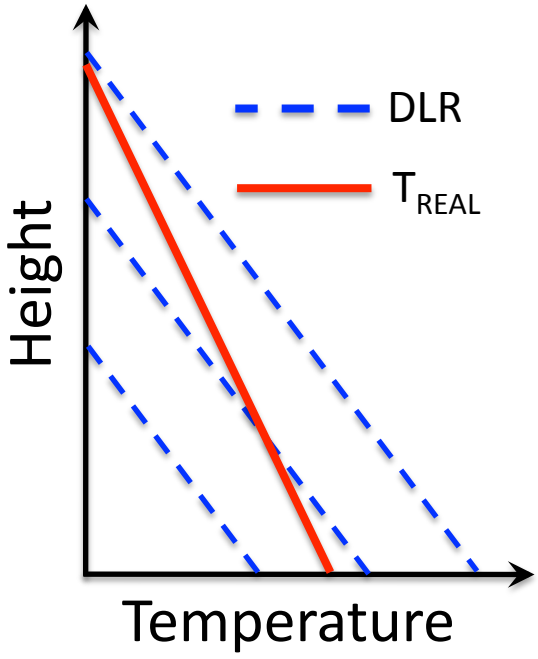
Profiles for Exercise 2

Match temperature profiles with photos. (Hint: start by putting photos in order of daytime development during a typical summer day.)

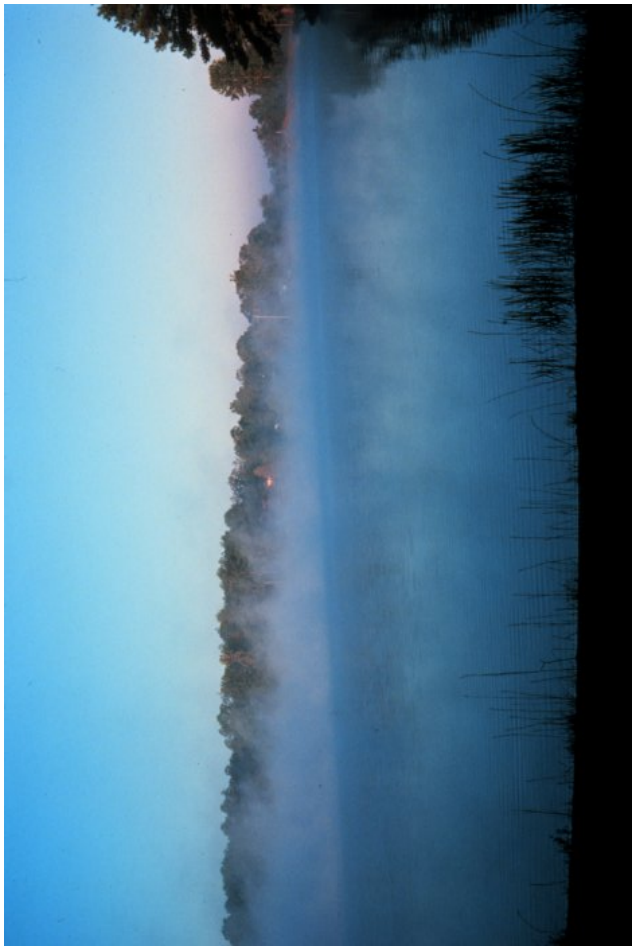






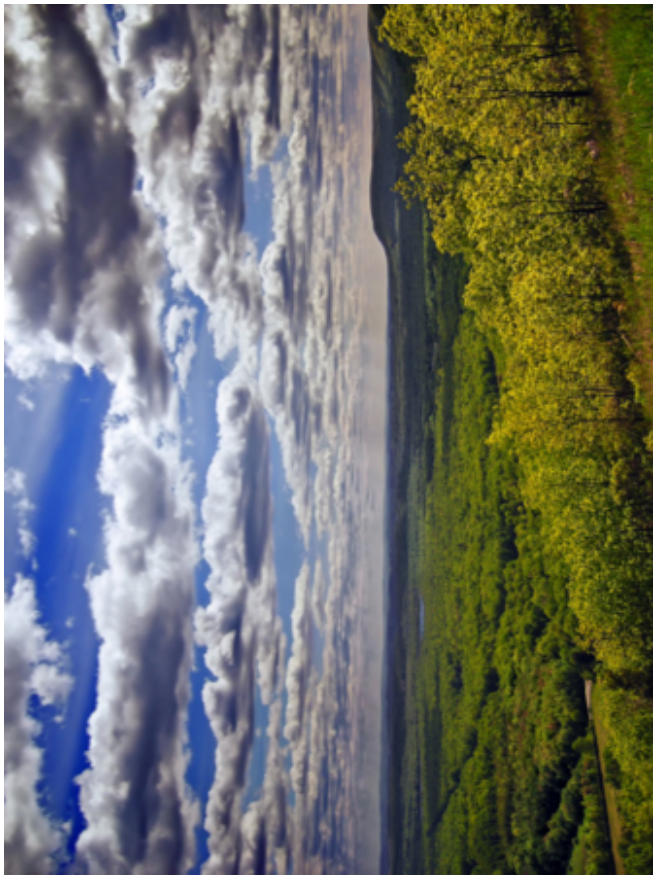


Exercise 2 Photos



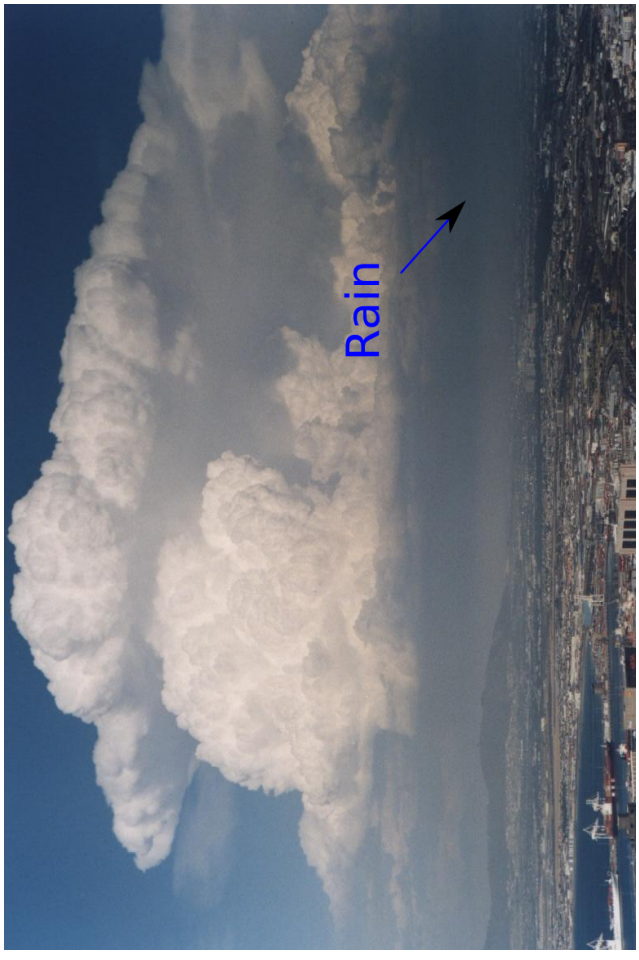
B

D



A

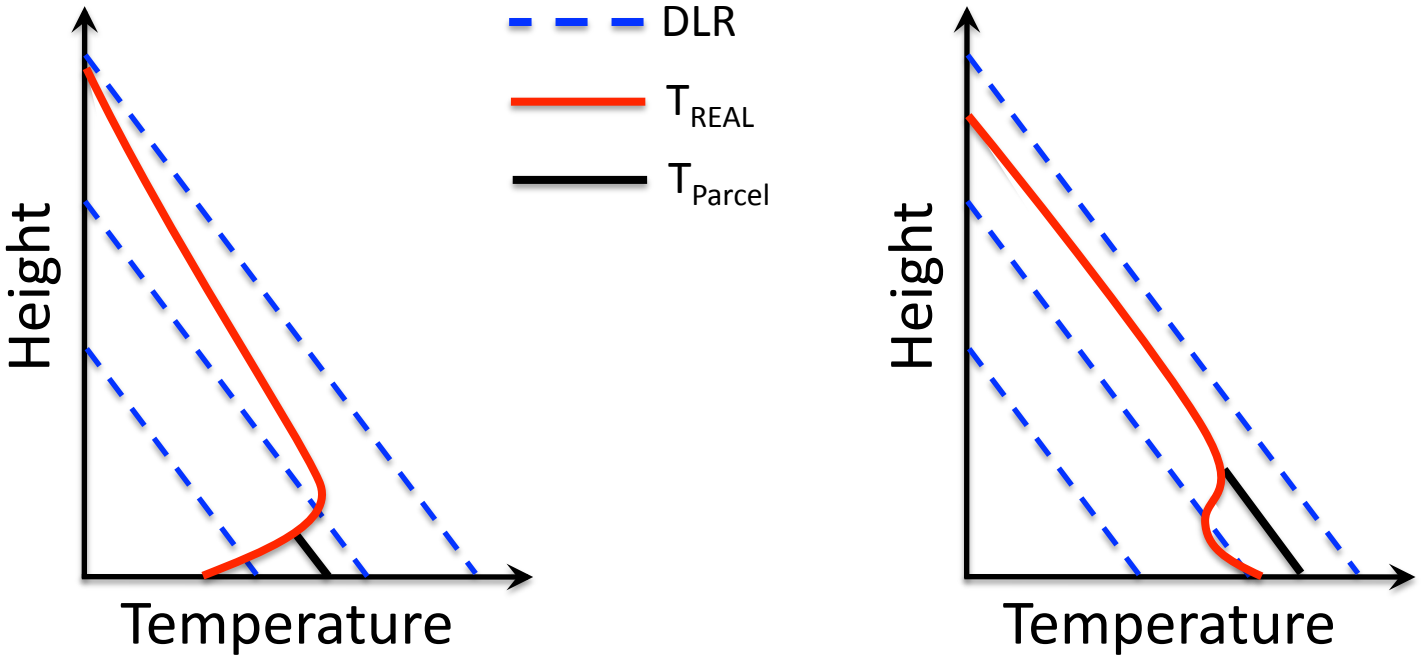
C



Sounding taken after rain passed

Solutions

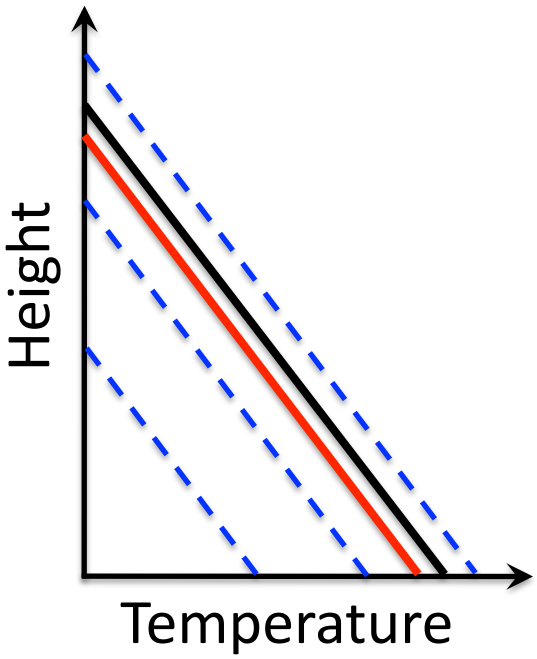
Exercise 1 Key



B

A

C



Exercise 2 Key