The fifth project of the semester asks us to observe more clouds. There are many different kinds of clouds, so we were asked to take many photographs of many different cloud types. We were also asked to determine why a certain cloud type was present in that current weather. The photos needed to show the type of cloud the student was trying to capture, as well as be aesthetically pleasing.

The photo I decided to use was taken on October 18, 2007 at 5:30 P.M. The sun had just set over the horizon, which gives the red glow seen in the photograph. This photo was taken facing due west. The temperature was 68°F, with 22% humidity, winds blowing WSW at 5.8 mph. The photo was taken on top of a hill at latitude: 39°55' 10.4", and longitude: -105°4' 11.39".

The camera used was a Canon EOS Digital Rebel XTi. The aperture was set for F: 11 with a shutter speed of 1/250 sec. The ISO speed was set for 200 with a focal length of 69mm. The dimensions of the photo are 3888 x 2592 pixels with a resolution of 72 dpi. http://www.capetownskies.com/clouds-index.htm

Using different websites, I classified the clouds in my picture as Stratocumulus Opacus clouds. "A layer of patches composed of laminae or globular masses arranged in groups, lines or waves and having a soft, grey appearance; very often the rolls are so close together that their edges join and give the undersurface a wavy character." (Stratocumulus Cloud) The clouds in the photo do exhibit "cumulo" type characteristics and are arranged in rows of clouds. Stratocumulus clouds are also a good indication that there is a cold front coming. This is exactly what happened on October 18th. It was a very nice day with highs above normal. That night a cold front moved in, and these clouds are an indication of that cold front. The purpose of this project was to take a picture of a cloud, classify it, and find out why the cloud was formed the way it was. The picture I took was of Stratocumulus Opacus clouds. They generally show that a cold front is moving in, and that is exactly what happened. Overall, I like the picture that was taken. Not only does it represent the type of cloud very well, it is also very beautiful because of the sunset. There are many different types of clouds out there, and many are very beautiful. You just have to be looking and always have your camera handy.

Works Cited

Funk, Ted. "Cloud Classifications and Characteristics." <u>The Science Corner</u> "Stratocumulus Cloud." <u>IUPAC Compendium of Chemical Technology</u>, 2nd Edition 1997.