

Travis Brown

Clouds 2 Report

Flow Visualization

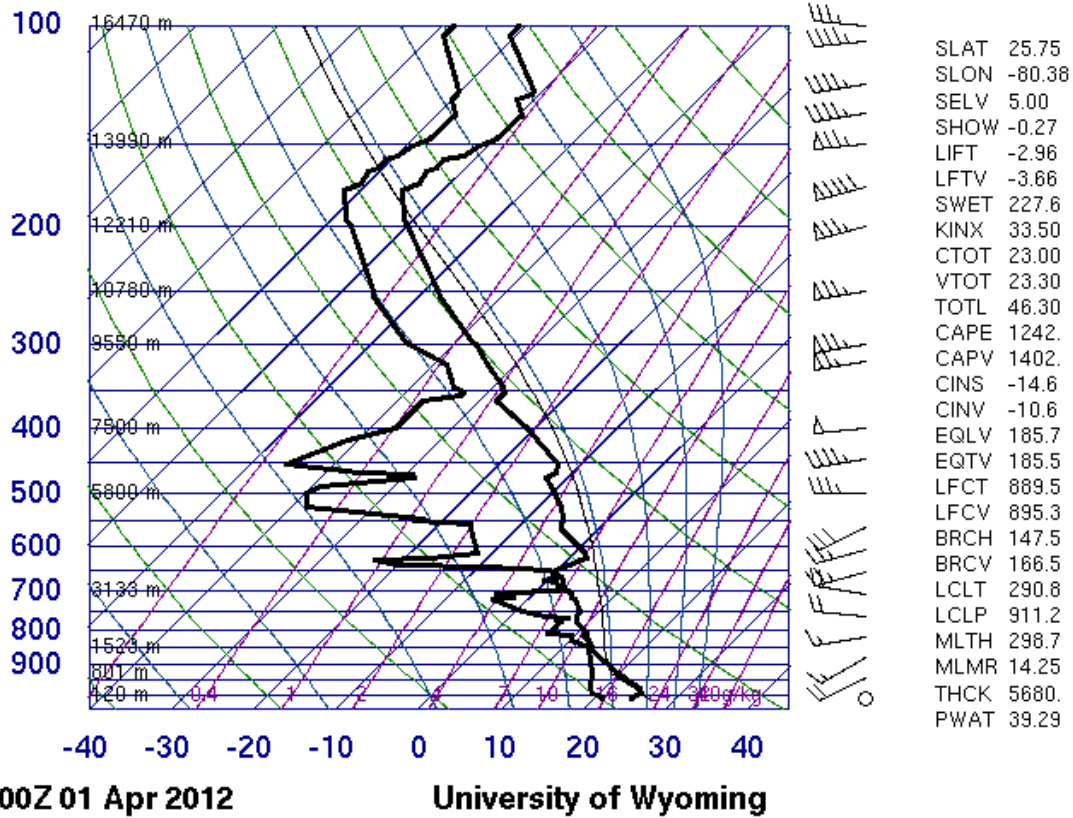
Cumulonimbus Cloud System

While boating in waters off the shores of South Miami, a brewing storm threatened. As clouds seemingly engulfed Downtown Miami, I pulled out my camera to capture the roaring cumulonimbus clouds billowing above. I was in the perfect place to catch an ocean-side storm system form.

The image was captured in Biscayne Bay just off the tip of Key Biscayne, FL. During the time of capture I was facing southwest towards Coral Gables, FL. My camera was set to about a 15 degree angle from the horizon line. It was taken at 2:30 pm on March 31, 2012.

The sky was one to embrace. As we sat in the boat, docked on a Biscayne Bay sandbar, clouds engulfed the South Miami beaches and made their way into the waters around us. To the east, blue skies covered the open ocean. It was clear that everyone on land was dealing with torrential downpours. Luckily the winds were not too heavy at the time. According to the closest skew-t plot the atmosphere was fairly unstable with clouds forming anywhere from 1000m to 8000m. The heaviest cloud disruption lying at 3119m (Web, 2012). The stability and cloud heights in this reading lead me to believe the clouds were Cumulonimbus.

72202 MFL Miami



University of Wyoming – Atmospheric Sounding Data

My image was taken with a Canon EOS Digital Rebel XTi using a zoom lens. The original and final resolution came to 3888 × 2592 px. In order to capture a detailed section of the cloud system I had to set the focal length to 75mm and the exposure time to 1/500 s. This allowed for a crisp image with no motion blurring. With half of the sky in cloud cover and half bright blue I had to choose an f-stop that would provide balance in lighting. I chose to go with f number 16 to achieve this balance. A few post-production Photoshop alterations were done to bring out the definition of the clouds. First, a slight brightness and

contrast shift. Then to finish it off I made some minor adjustments to the curves, which brings out the whites in the cloud.

The final image reveals the formation of a cumulonimbus clouds system right before a coastal storm. The cloud's puffy and upward form really makes this apparent and informs the viewer what exactly a storm cloud may look like. The framing and visual appeal of the image do indeed achieve my intent of capturing a brewing Cumulonimbus cloud.

Source

1. Web. 09 May 2012. <<http://weather.uwyo.edu/cgi-bin/sounding?region=naconf>>.



Photo taken by Travis Brown.