

DISCOVER-AQ Outlook – Sept. 4, 2013

Thunderstorm activity this morning along the coastal region and over Galveston Bay complicated the picture for today's flight in terms of clouds. However, these storms had dissipated by midday. Winds were very light today, leading to an ill-defined transport pattern. Winds became better defined from the E and SE by late in the day.

The easterly winds are forecast to persist at least through Saturday. Each day will have chances of scattered thunderstorms. We are watching an easterly wave progressing across the Gulf to our south. The forecast models suggest the possibility of high cirrus from this system approaching our area on Thursday, but the NWS downplays this. They suggest that drier air moving in from the north will actually decrease cloudiness Thursday and Friday, compared with today. In terms of clouds, Friday and Saturday look even better than Thursday.

Moderate levels of ozone were forecast for both today and tomorrow. Unfortunately, we don't have air quality model forecasts that cover Friday as yet. However, we expect that maximum ozone will be found on the west side of the city due to the easterly flow. The CAMx model suggests that transport from southern Louisiana will contribute enhanced ozone and formaldehyde in the residual layer on Thursday, and this will likely continue into Friday. Aerosols will likely decrease from today's levels with the flow of more marine air. The sea salt component will increase and the sulfate will decrease.