

## DISCOVER-AQ Outlook for Tuesday, July 12, 2011

Large mesoscale convective systems (MCSs) have been active today from Iowa to Ohio. Upper-level outflow from these systems should reach our study area overnight. The convection will reach western PA tonight and likely spread high cloud across our region through much of the morning. Clearing from west to east will occur by later morning, allowing a few hours of intense solar heating, which will drive possible deep convection over our region in the afternoon. Therefore, there will likely only be a short window of opportunity for flying tomorrow. Ozone air quality will likely go to Code Orange, especially if there are some hours of relatively clear sky in the midday period. Due to the cloud situation, we have decided not to fly tomorrow. The frontal system approaching from the Midwest will pass through Tuesday night. Wednesday looks iffy at the moment, with possible clouds behind the front. With a short-wave trough still to our west on Wednesday, this should provide enough vertical motion to induce considerable shallow convection in the afternoon. We will update the outlook for Wednesday tomorrow. Farther ahead, Thursday looks like a very nice day for flying, with cooler, drier, and cleaner conditions as a Canadian airmass moves our way.