

DISCOVER-AQ Outlook for Sunday, July 10, 2011

Sunday looks like a great day to fly as high pressure intensifies over our study region leading to generally clear skies with southerly flow at low levels. Fair weather cumulus clouds may develop in the afternoon. The high pressure area merges with the Bermuda High on Monday and puts us into a more southwesterly flow regime. A frontal system will be approaching from the Midwest on Monday afternoon. Convection in that region may lead to high level cirrus by late in the day on Monday, but more certainly overnight Monday night into Tuesday. As the front gets closer on Tuesday, some local thunderstorm activity may occur. Frontal passage will likely be Tuesday night. Some of the region, especially along the western shore of the Bay will likely experience Code Orange O3 tomorrow. With near stagnation conditions and considerable ozone in the residual layer to mix downward on Monday AM (as indicated by the experimental CMAQ), widespread Code Orange with some Code Red ozone is expected Monday afternoon. GEOS-5 is predicting relatively low AOD tomorrow, with somewhat more (up to 0.4 -0.5 on Monday). We recommend flights on both Sunday and Monday.