

Summary

The dust event on 30 July 2016 was the result of the overnight thunderstorms that developed as a result of the advection of monsoon moisture into the Southwest US during the previous day.

The combination of the afternoon heating and the moisture moving over the unstable side of the High resulted in afternoon/evening thunderstorms in Arizona. These thunderstorms led to the development of a Mesoscale Convective Complex (MCC) over the Phoenix area between 2045-2215 MST which is depicted in the satellite imagery.

At around 2145 MST, a very strong outflow boundary was produced by the MCC that travelled west through north towards Southern California and Southern Nevada as depicted in the satellite imagery provided. As the outflow boundary moved out from the Phoenix area, it picked up a large, deep layer of dust which it carried into Southern Nevada which remained in the Vegas Valley all day.