



NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE

Miami, Florida 33165

WFO Miami Provides Super Bowl XLIV Decision Support



Picture 1: Operations floor at the Super Bowl XLIV Joint Operations Center (JOC)

February 11, 2010: Last week, WFO Miami was privileged to provide direct decision support to federal, state and local agencies as part of the law enforcement and security efforts undertaken for Super Bowl XLIV in south Florida. WFO Miami lead forecasters Roberto Garcia-Hiraldo and Dan Gregoria, Warning Coordination Meteorologist Robert Molleda and Science and Operations Officer Pablo Santos rotated through two 8-hour shifts at the Super Bowl XLIV Joint Operations Center (JOC, Picture 1 above) located at the Broward County Emergency Operations Center in Plantation. WFO staffing at the JOC began on Monday, February 1st and continued through game day on February 7th. WFO forecasters were on-site at the JOC between 8 AM and Midnight, with additional overnight on-call support provided by the remainder of the forecast staff at the WFO.

The WFO staff at the JOC briefed the partner agencies on potential weather impacts at the twice-daily operational briefings at 9 AM and 5 PM daily. The forecasters maintained a continuous weather watch (Picture 2) and provided one-on-one briefings to several agencies at the JOC.

A main area of emphasis for WFO forecasters was providing daily operational runs of HYSPLIT, NOAA's atmospheric trajectory and dispersion model for releases of hazardous materials and chemicals. The HYSPLIT model data serves as a critical tool in determining areas which might be impacted by a chemical or hazardous material release. This information was shared with other agencies at the JOC (Picture 3), including CBRNE (chemical, biological, radiation, nuclear, high explosive) Civil Support Teams from the state National Guard deployed at Sun Life Stadium. These teams were part of the Defense Threat Reduction Agency (DTRA) efforts.

Significant weather events during the support period included:

-Heavy rain/flooding event over southern Broward County on Monday, February 1st.

This event had minor impacts on event operations due to its occurrence early in the week and before the onset of big game-related events. Nevertheless, this event gave the WFO support staff an opportunity to interact and coordinate directly with Broward County DEM staff already on site.

-Pre-frontal convection Friday evening, February 5th.

A tornado watch was in effect for southwest and central Florida from approximately 2 PM to 8 PM on Friday, February 5th. Although the watch did not include event locations in southeast Florida, a broken band of showers and thunderstorms moved through the region between 7 and 9 PM. One thunderstorm in particular exhibited rotation and resulted in the issuance of two tornado warnings by WFO Miami at 819 PM and 846 PM for northern Miami-Dade and southern Broward counties. In addition to the general threat to the public, the storm posed a threat to Sun Life Stadium (site of Super Bowl), with the cell associated with the second tornado warning passing about 1 mile north of the stadium. Fortunately, no tornado touchdowns were reported. WFO staff at the JOC announced the warnings to the entire operations floor and kept Miami-Dade and Broward County law enforcement officials on site advised of the latest situation.

At least three major outdoor events were occurring at the time the showers and thunderstorms moved through; a music concert on Miami Beach, a large party at the Seminole Hard Rock Hotel and Casino in Hollywood and a VIP reception/party at Viscaya just southwest of downtown Miami. Briefings were provided to Seminole Tribe emergency management officials in advance of the showers and thunderstorms. In addition, an e-mail briefing was distributed by WFO Miami to south Florida emergency managers during the late morning advising of the threat of storms and damaging wind gusts.

Conclusion:

WFO Miami's participation in the Super Bowl XLIV decision support was an excellent opportunity to not only provide direct decision support for an event of the magnitude of the Super Bowl, but also to establish and strengthen relationships between the National Weather Service and a wide range of federal, state and local partners.



Picture 2: WFO Miami WCM Robert Molleda staffing the NWS desk at the JOC



Picture 3: HYSPLIT model and satellite data displayed at the main situational awareness board at the JOC