

## **WINTER STORM SUMMARY FOR FEBRUARY 28, 2005 TO MARCH 1, 2005 EVENT**

### **Synopsis**

Low pressure developed in the Gulf of Mexico Sunday, February 27th, 2005. Meanwhile, cold high pressure was anchored across southeastern Canada and New England. This high pressure system supplied cold, dry air across the region. As the Gulf of Mexico low pressure system moved northeastward Sunday and Sunday night, a large area of precipitation began to spread northward up the East Coast. As the storm intensified off the Southeast Coast Sunday night and Monday, moisture steadily lifted northward up the East Coast. Snow began to fall over Delaware and the eastern Maryland Shore Counties during the early to mid morning hours on Monday. Initially the air mass was dry therefore the snow farther to the north did not reach the ground. Gradually the air mass across the entire region did become saturated and snow developed from south to north across the entire area by early Monday afternoon. With the cold, dry air mass firmly entrenched across the majority of the region, temperatures fell a couple of degrees once the snow began. The snow continued Monday afternoon and Monday night at varying intensity. There were a few heavy bands of snow that moved through the region Monday afternoon and again Monday night. These bands produced snowfall rates of 1 to nearly 2 inches per hour, however the heavy snow was generally restricted to a short period of time. As the low pressure system continued to move northeastward Monday, some milder air arrived across southern Delaware and southeast New Jersey. This allowed the snow to change to some sleet and rain, which significantly limited snowfall accumulations. As the storm moved farther northeastward Monday night and early Tuesday morning, snow continued to fall across our region. However, the snow then gradually tapered off to some flurries or snow showers early Tuesday morning from southwest to northeast.

### **Watches/Warnings/Advisories**

A Winter Storm Watch was issued for Monday and Monday night at 4:50 AM Sunday, February 27th. This watch included all counties, with the exception of Cape May (including coastal areas) and Coastal Atlantic in New Jersey, Sussex (including coastal areas) in Delaware, Talbot and Caroline in Maryland. At 4:15 PM Sunday, a Winter Storm Warning was issued for Monday and Monday night for nearly all counties, however a Winter Weather Advisory was issued for Cape May county in New Jersey and Inland Sussex in Delaware. At 9:30 PM, the Winter Storm Warnings and Winter Weather Advisories were updated and reissued with no changes made to the counties included. At 5:10 AM Monday, February 28th, a Winter Storm Warning remained in effect for most areas, however the following counties were now in a Winter Weather Advisory, Atlantic (including the coastal areas), Ocean (including the coastal areas), Cumberland, and Southeastern Burlington in New Jersey; Caroline, Kent, Queen Anne's, and Talbot in Maryland; Kent in Delaware. At 11:20 AM, the Winter Storm Warnings and Winter Weather Advisories were updated and reissued with no changes made to the counties included. At 3:21 PM Monday, February 28th there were some changes to the warnings and advisories. Most of the region remained under a Winter Storm Warning, however the following counties were under a Winter Weather Advisory for Monday night, Eastern Monmouth, Ocean (including coastal areas), Cumberland, Southeastern Burlington, and Atlantic (including coastal areas) in New Jersey; Caroline, Kent, Queen Anne's, and Talbot in Maryland; Kent in Delaware. At 3:21 PM, the Winter Weather Advisory for Coastal Atlantic in New Jersey was discontinued. At 8:55 PM, all Winter Storm Warnings and Winter Weather Advisories remained the same. At 11:40 PM, the Winter Weather Advisory for the counties mentioned above was extended until 4 AM Tuesday, March 1st. At 12:20 AM Tuesday, March 1st, the Winter Storm Warnings remained in effect with no changes to the counties included. At 3:52 AM, the Winter Storm Warnings and Winter Weather Advisories were cancelled for southeastern Pennsylvania and southern New Jersey. Areas further to the south, the previous advisories were allowed to expire late Monday night. Central and northern areas, the warnings and advisories were continued. However at 6:20 AM, all warnings and advisories were cancelled, with the exception that the Winter Storm Warning remained in effect for Carbon and Monroe Counties in Pennsylvania, and Sussex County in New Jersey until 1 PM Tuesday. This warning was cancelled by late morning on Tuesday, March 1st.

### **Precipitation/Temperatures/Winds**

This storm was nearly a true Nor'easter as the storm developed in the Gulf of Mexico then moved up the East Coast, but far enough off the coast to keep the strongest winds confined closer to the coast. Snow overspread the region during Monday morning from south to north. Initially the snow was a little slow in developing as a dry layer of air caused the snow