

## Summary for February 5-6 2010

This winter storm was the most significant event of the 2009-10 season, ranking as one of the heaviest snowfalls of all-time for many places in the Mid Atlantic region, and was rated as a NESIS (Northeast Snowfall Impact Scale) Category 3 (major) event.

Widespread 2 foot plus snow totals with near blizzard conditions affected areas from Maryland and southern Pennsylvania to southern New Jersey, including the Washington DC, Baltimore, Philadelphia, and Pittsburgh metropolitan areas. Totals of greater than 30 inches were common to the northwest of Baltimore.

A strong southern stream shortwave trough pushed toward the Southeast from northern Mexico, eventually merging with a northern stream impulse which crossed the central Plains. A surface low formed near the central Gulf Coast and lifted northward before stalling across eastern Kentucky. This feature resulted in heavy snow totals from Indiana to western Pennsylvania. A deepening closed low over eastern Kentucky, along with the approaching shortwave energy, sparked rapid cyclogenesis near and just off the coast of southeastern Virginia. A strong blocking pattern over the Canadian Maritimes and the North Atlantic prevented the system from tracking northward, and instead steered the circulation eastward from the coast. This resulted in only a trace of snow in New York City (Central Park), and no accumulating snow in New England. A deep inflow of moisture from the Gulf and subtropical Pacific, as well as a strong low level easterly Atlantic flow into the Mid Atlantic area provided support for the excessive snowfall. A strong surface ridge centered over Ontario supplied abundant cold air into the United States, and allowed the precipitation to remain in the form of snow across the urban corridor. The forecast guidance provided a long lead-time for this event, with numerous indications for a significant storm one week in advance.

Snow totals in inches:

Philadelphia, PA 28.5

Baltimore, MD 25.0

Washington (DCA) 17.8

Washington (IAD) 32.4

Pittsburgh, PA 21.2