

Meeting Minutes – Winter Weather Forum

February 1st, 2010

National Weather Service, Mount Holly, New Jersey

- The current chapter officers, Paul Heppner as President, Dean Iovino as Treasurer and Paul Smith as secretary were introduced.
- Dean Iovino indicated that he would be working on a revision of the chapter constitution to remove sections that were no longer applicable to the chapter.
- Paul Heppner requested candidates for Vice President and Treasurer, with elections to take place in the spring.
- Future meetings were discussed, including a possible meeting at the University of Delaware in late March or early April with the topic to be determined.
- Other possible social events were discussed, including either a chapter dinner or an outdoor event sometime this summer.
- The chapter has a Facebook page for members at Delaware Valley AMS and a Blogspot page at <http://amsdephil.blogspot.com/> . Chapter members were encouraged to use the social networking as a means to communicate within the chapter.
- The chapter officers discussed public outreach efforts for the group, including for chapter members to volunteer, if they wish, to give presentations to local civic groups. There may also be possibilities for chapter members to mentor to those studying atmospheric science at schools or universities within the domain of the local chapter.
- As part of the winter weather forum, there were three presentations. Al Cope (National Weather Service – Mount Holly) gave a presentation on a March 1-2, 2009 gravity wave that traversed the East Coast. Paul Heppner (3SI) gave a presentation on snowfall variance in the Northeastern U. S. and Dean Iovino (National Weather Service – Mount Holly) presented slides on the December 19-20, 2009 snowstorm.
- Al Cope made a presentation that depicted a strong gravity wave that traversed the East Coast on March 1-2, 2009. These slides showed a cross section of the gravity wave, upper level data soundings at various sites, surface data and radar data. The conclusions of the presentation were that the gravity wave was responsible for severe weather -- in this case, wind gusts of 40 to 50 knots along its path and pressure falls of up to 8 mb. One minute ASOS data was useful in identification of the wave, but was not available real-time. Had the one-minute ASOS data been available in real-time, the presence of the gravity wave may have

been more evident. Finally, operational models (WRF/NAM) gave a hint of the gravity wave, but were off in the placement of the pressure falls associated with the wave.

- Paul Heppner made a presentation showing the mean snowfall, standard deviation and coefficient of variation (standard deviation/mean) for 10 sites in the Northeast, including coastal plain locations and sites in the interior Northeast. The data showed that at the interior Northeast, the standard deviations were higher, but the coefficient of variation was lower. The data also showed that snowfall variance is more pronounced in sites closer to the coast and interestingly, Boston's snowfall variance, even though it is located further north along coast, was nearly equal to that of Washington Dulles.
- Dean Iovino made a presentation associated with the December 19th, 2009 snowstorm. Iovino traced the surface movement of the storm and its corresponding 500 mb charts. Meteograms from PHL depicted the progression and surface weather associated with this storm. Many locations in the Delaware Valley received more than 20" of snow from this early winter storm, as shown on a snowfall total graphic.
- The Winter Weather Forum concluded with some general discussion about weather patterns affecting the Northeast, including the persistence of a polar vortex that created an unusually rainy summer, which has led into a winter with frequent passage of storms and low pressure systems.
- The chapter adjourned the Winter Weather Forum and will meet again during Spring 2010.