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# West Henrico Co. – Glen Allen VA. Weather Station

**FOR:** Views for the February 5th and 6th Video

**VIDEO ADDRESS:**
http://www.glenallenweather.com/links/snows09-10/feb5th-6th2010.avi

The 2010 snowstorm could have been one of the largest snowstorms Richmond ever had, if in fact, all of the precipitation had fallen as snow. When the video starts you'll **see the snowboard set on top of about 3.5 inches of snow from a previous storm.** The snow started on February 5 at about 8:20 AM and precipitation occurred until 5 PM on February 6 approximately 33 hours. There was a total of 2.50 inches liquid precipitation in the storm of which about 1.10 inches fell in the form of snow; the other 1.40 inches fell as rain. In the video you will see an accumulation of about 0.45 inches of snow before the snow turns to sleet and then rain. It rained hard between 2300 and midnight while the temperature was about 33 °F. **Rain splatter is seen on the glass of the camera box.** The rain actually melted the 4.5 inches of snow down to about 2.8 inches and also melted much of the 3.5 inches of granular snow that was on the ground when the storm got underway. **Then you see the snow start to accumulate again as the rain turned back to snow on the back side of the storm system and accumulated an additional 6.6 inches.** If the 1.40 inches of liquid precipitation was snow you could add at least 14 inches of additional snow. Thus if it had all been snow you would add the 4.5 inches, 6.6 inches and 14 inches and obtain a total of **25.1** inches. Also remember there was 3.5 inches of granular snow on the ground when this storm started. If these are added together the total depth of snow on the ground could be as much as **28.6** inches. In reality some settling would reduce this snow but should be around 2 feet at least.

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After the snow stops you see settling of the snow occur in the video but continue to watch and you will observe the growth of frost crystals on the snow surface just to the right of the snow measuring stake just after midnight. The crystals grow so much that they collapse around 5 AM and new crystals form. Most of us have observed how the snow sparkles in the morning sunlight. From this observation it is probably the frost crystals rather than snow crystals that are causing much of the early morning sparkle effect on the snow.