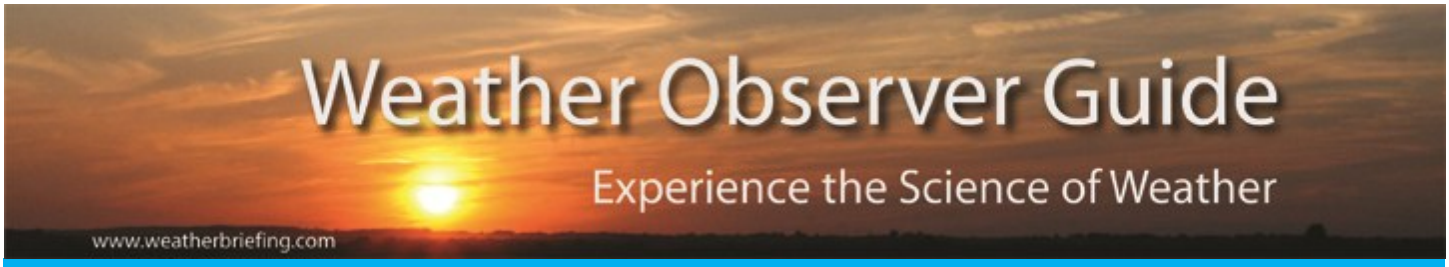


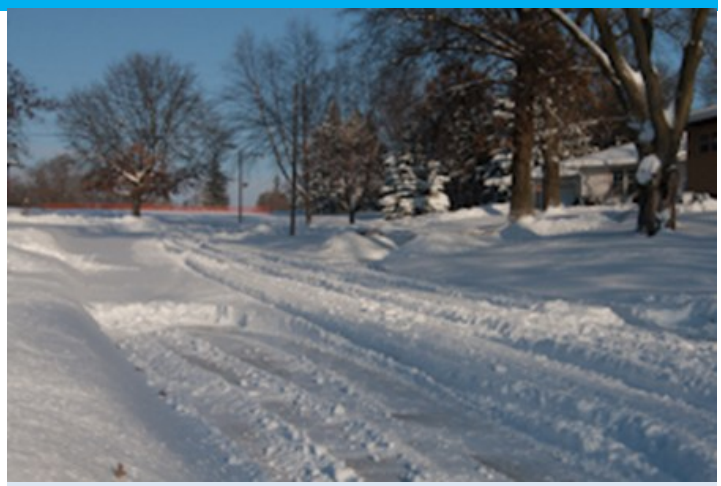
Measuring New Snow and Snow Depth

There are two types of snow measurements; new snow and total snow depth. New snow is measured to the nearest 1/10th of an inch while snow depth is measured to the nearest inch. Making accurate measurements of snow and snow depth require learning the proper observation techniques. Winds during and after a snowstorm may whip the snow into drifts while blowing nearby areas clean. To make the most accurate observation begin by scanning the area of spots where the snow is not drifted or blown away and areas that represent the average snow depth.

If possible it is a good idea to avoid measuring snow on grass. Grass may lift the snow above ground level making the depth appear deeper. Stay as far away from buildings as possible. Buildings cause the wind to create drifts and areas that are blown clear. The best locations are hard surfaces where there has been little effect from the wind. Sometimes a driveway or sidewalk works well as long as the snow did not melt on a warm surface. Try to measure at least 30 feet away from a building or other objects if possible. Good locations are often in areas where medium size bushes have minimized the effects of the wind.

It may seem surprising but snow is measured by special rulers marked to the nearest 1/10th of inch. However if you don't have a measuring stick marked in 10ths of an inch use an ordinary ruler.

Be sure to enter your snowfall and total snow depth on your weather observing form.



Learn by doing! Try measuring in an open area where the wind has not affected the snow depth. If your location is less than ideal (most amateur locations are in that category) do the best you can.

Snow boards can be helpful if they are placed in a good location. A snow board is typically 16 by 16 inches (or bigger) and is placed on a level surface where snow is not expected to drift or be blown away. The board, painted white, provides a solid surface on which to measure the snow. Use a ruler to check the snow depth. Under ideal circumstances when winds have been light a picnic table works well. Ideally you will make several measurements and average them to get the best estimate. Ten measurements make it easy to do the math when you take the average. Be precise and as careful as possible and you will get good results.

If your location isn't ideal for measuring snow that is part of learning . Taking measurements and understanding the reasons for errors is a valuable exercise. It is part of doing science.

When making measurements you may determine both the new snow depth and the total snow depth. New snowfall is what fell in the current storm. The snow depth is the total snow cover on the ground. It includes the new snow and the old snow cover. Keep in mind that snow compacts and sublimates (changes from a solid to water vapor). Even without melting, both processes gradually reduce the total snow depth over time.