

# Joint Polar Satellite System JPSS and Snowfall

It's Winter!

Winter starts December 21, and snow has already begun to fall. Throughout the winter, scientists measure and compare snowfall at different locations. This snowfall data is important for understanding snowstorms and measuring the average snowfall from year-to-year. Scientists also measure how much snow melts and is stored in Earth's water cycle.

Earth-observing satellites like the Joint Polar Satellite System (JPSS) help scientists measure snowfall in remote areas where scientists can't measure the snow themselves. JPSS watches the clouds as they form heavy storms and drop snow to the ground. During and after a snowstorm, JPSS can measure how much snow is falling and how deep the snow on the ground is. These snowfall rates are measured as they happen, helping scientists forecast snowfall and snowfall depth.



## **Snowfall**

*is the measurement (in inches) of fresh snow and ice in one day (24 hours).*



Want to measure snow?  
**Make a Snow Stick!**

# Make a Snow Stick

## You will need

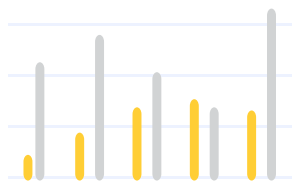
- A long, flat piece of wood like a paint stir stick to create your snow stick
- A ruler to place inch markings on your snow stick
- Paint or markers for placing measurements and decorating your snow stick
- Pen and paper for recording results
- A snowy day!

## Measuring Snowfall

1. **After it snows**, place your snow stick in an open area of your yard or porch away from the house or trees.
2. **Measure** how many inches of snow fell on your snow stick. You can double check your results by measuring other parts of your yard or porch and averaging the totals (this also accounts for wind). Record the date, time and the snowfall to the nearest inch.

*Example:* 12/21/2020, 8:00 am, 2 inches

Great job! You just measured your first snowfall!



### Compare Snowfall Report

Compare your snowfall rates to NOAA/JPSS scientific data here at:

<https://www.ncdc.noaa.gov/snow-and-ice/daily-snow/>.

You can find your state, town and date of snowfall and compare snowfall rates.



Learn more about JPSS at

<https://www.nesdis.noaa.gov/jpss-education>



#### JOINT POLAR SATELLITE SYSTEM (JPSS)

JPSS is the Nation's new generation polar-orbiting operational environmental satellite system. JPSS is a collaborative program between the National Oceanic and Atmospheric Administration (NOAA) and its acquisition agent, National Aeronautics and Space Administration (NASA).

 [www.nesdis.noaa.gov/jpss](http://www.nesdis.noaa.gov/jpss)

 [Facebook.com/JPSS.Program](https://www.facebook.com/JPSS.Program)

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