



## #NASATeachableMoments With NGSS Connections

### #1:

K-ESS2-1: How can scientists measure snow or rain?

<http://gpm.nasa.gov/education/videos/what-we-dont-know-about-snow-gcpex>

<http://gpm.nasa.gov/education/videos/for-good-measure>

<http://gpm.nasa.gov/education/videos/faces-gpm-professor-steve-nesbitt-gpm-ground-validation-scientist>

<http://gpm.nasa.gov/education/lesson-plans/how-do-you-build-weather-satellite>

3-ESS2-1: Where on the earth will Global Precipitation Mission measure snow and rain?

<http://gpm.nasa.gov/education/videos/global-precipitation-measurement-constellation>

<http://gpm.nasa.gov/education/videos/our-wet-wide-world-gpm-overview>

MS-ESS2-1: How can we measure the amount of water needed to affect surface weathering?

<http://gpm.nasa.gov/education/lesson-plans/landslides-erosion>

<http://gpm.nasa.gov/education/articles/satellite-monitors-rain-triggers-landslides>

<http://gpm.nasa.gov/education/videos/faces-gpm-dr-dalia-kirschbaum-gpm-applications-scientist>

HS-ESS1.B: What might cause an “ice age” and how can we determine a timeframe for it?

<http://gpm.nasa.gov/education/lesson-plans/climate-change-online>

### #2:

K-ESS2.1: Does weather have patterns?

<http://gpm.nasa.gov/education/videos/nasa-our-world-what-weather>

3-ESS2-2: Is it important that GPM provides many measurements?

<http://gpm.nasa.gov/education/videos/gpm-engineering-next-generation-observations-rain-and-snow>

<http://gpm.nasa.gov/education/videos/worldwide-rain-gauges-animation>

MS-ESS2-3: How does water cycle?

<http://pmm.nasa.gov/education/lesson-plans/water-cycle>

<http://gpm.nasa.gov/education/lesson-plans/exploring-water-cycle>

HS-ESS1.B: How does Earth's precipitation change from regional climates to global climates?

<http://gpm.nasa.gov/education/lesson-plans/geographical-influences>

<http://gpm.nasa.gov/education/lesson-plans/monsoons>

**#3:**

K-ESS2-1: How will observing and measuring weather help people?

<http://gpm.nasa.gov/education/videos/gpm-too-much-too-little>

<http://gpm.nasa.gov/education/videos/gpm-hurricanes-beyond-tropics>

<http://gpm.nasa.gov/education/videos/gpm-freshwater-connection>

3-ESS2-2: Can we predict weather from what has happened in the past?

<http://gpm.nasa.gov/education/videos/towers-tempest>

<http://gpm.nasa.gov/education/videos/trmm-15-reign-rain>

MS-ESS2-3: Draw a model that helps you understand how water cycles.

<http://pmm.nasa.gov/education/lesson-plans/water-cycle>

<http://gpm.nasa.gov/education/lesson-plans/exploring-water-cycle>

<http://gpm.nasa.gov/education/interactive/water-cycle-webquest>

HS-ESS2.C: What are the chemical and physical properties of water that make it so unique?

<http://gpm.nasa.gov/education/videos/anatomy-raindrop>

<http://gpm.nasa.gov/education/lesson-plans/measuring-raindrops>

**#4:**

K-ESS2-2: Where does the water that falls to Earth as rain or snow go?

<http://pmm.nasa.gov/education/lesson-plans/water-cycle>

3-ESS2-2: What is a pattern?

<http://pmm.nasa.gov/waterfalls/science>

MS-ESS2-5: How does a drop in temperature of an air mass affect precipitation?

<http://pmm.nasa.gov/resources/faq/what-causes-thunderstorms>

HS-ESS1: How will new technologies from GPM help advance climate science?

<http://gpm.nasa.gov/education/videos/towers-tempest>

<http://gpm.nasa.gov/education/lesson-plans/hurricanes-and-hot-towers-trmm>

**#5:**

K-ESS2-2: What weather pattern would you like GPM to help you observe?

<http://pmm.nasa.gov/articles/nasa-jaxa-prepare-gpm-satellite-launch>

3-ESS2-2: How can measuring weather patterns help us?

<http://gpm.nasa.gov/education/videos/science-hungry-world-agriculture-and-climate-change>

MS-ESS2.C: How are global movements of water affected?

<http://pmm.nasa.gov/science/global-water-cycle>

HS-ESS1: Describe one new technology introduced by GPM. How might this new technology be applied in a different arena?

<http://gpm.nasa.gov/education/interactive/gpm-core-observatory-paper-model>

<http://svs.gsfc.nasa.gov/vis/a010000/a011200/a011253/index.html>