

Image: It's valley fog season

October 29 2018



Credit: NASA/Joshua Stevens/Adam Voiland

It's autumn in the Northern Hemisphere, which means many people living in mountainous areas are awakening to fog-filled valleys.

As nights lengthen with the season, the atmosphere has more time to cool down and approach the dew point—the temperature at which the air becomes saturated and water vapor condenses into fog. Since cold air is denser than warm air, it sinks and drain into valleys, meaning fog develops there first. Many valleys also have rivers and streams, which amplifies the process by providing a ready supply of water vapor.

The Visible Infrared Imaging Radiometer Suite (VIIRS) on the Suomi NPP satellite captured a glimpse of this process at work in the mountains of West Virginia on October 24, 2018. The sensor acquired the nighttime image at about 2 a.m., when fog had filled many valleys of the Cumberland Mountains.

Provided by NASA

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