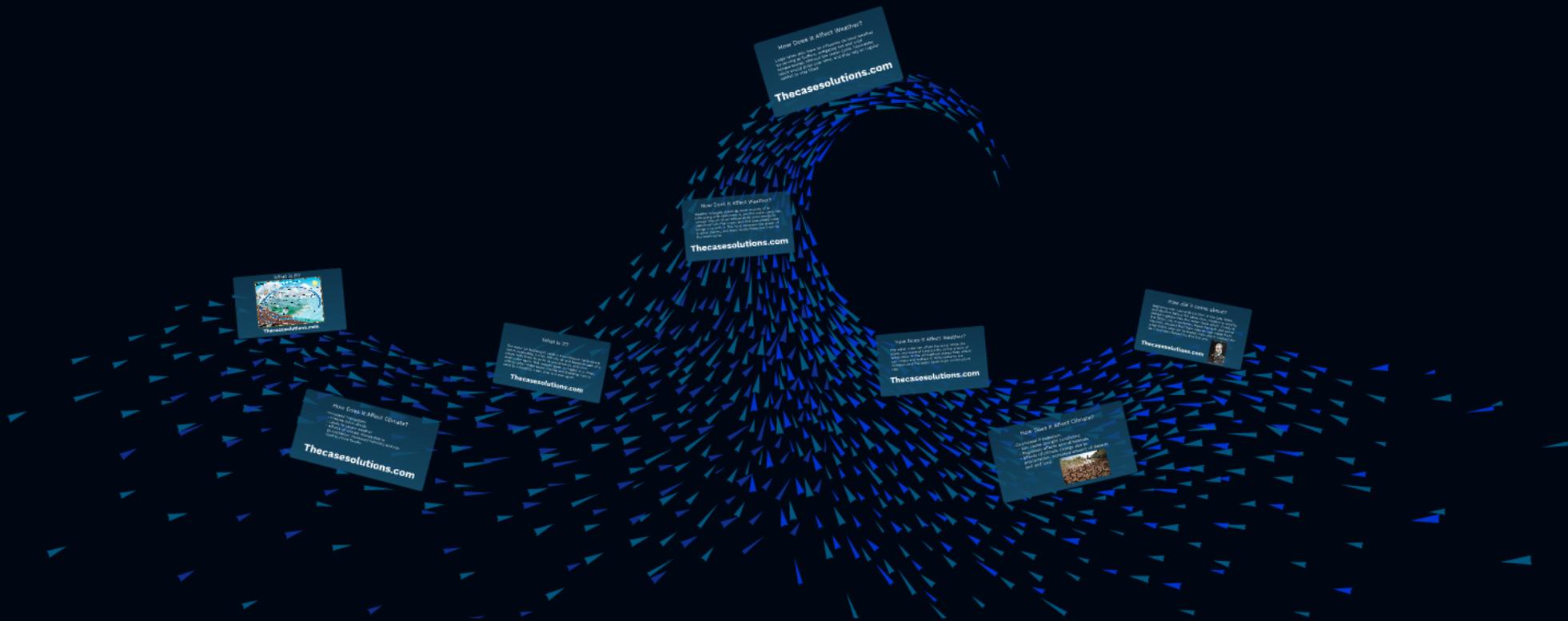


The Water Cycle, Climate Change, and (Some of) Their Interactions

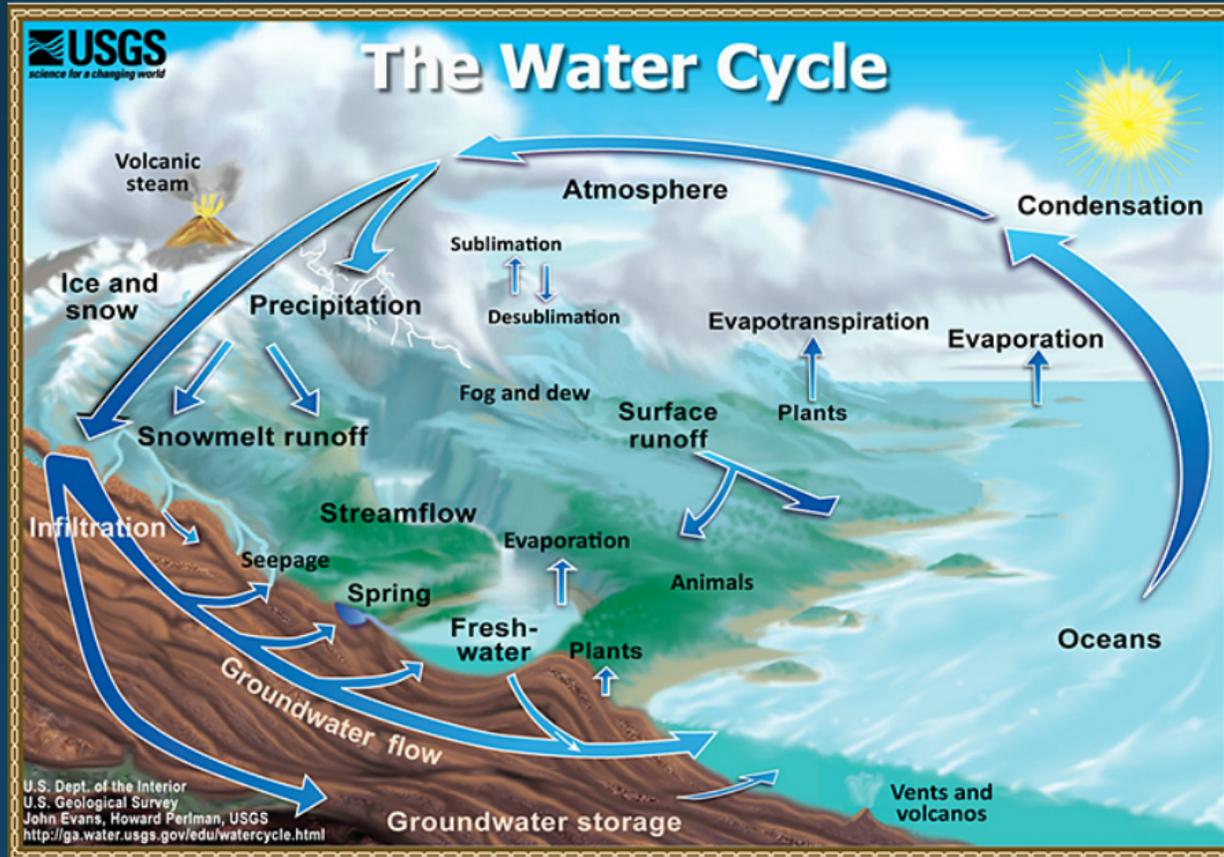
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The Water Cycle, Climate Change, and (Some of) Their Interactions

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What is it?



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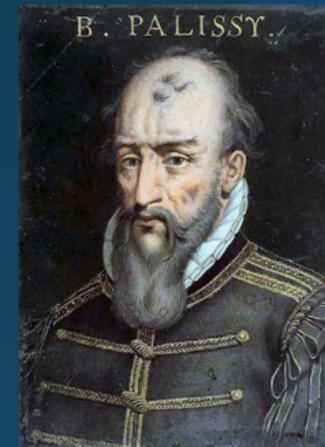
What is it?

The water (or hydrologic) cycle is a continuous cycle where water evaporates, travels into the air and becomes part of a cloud, falls down to earth as precipitation, and then evaporates again. This repeats again and again in a never-ending cycle. Water keeps moving and changing from a solid to a liquid to a gas, over and over again.

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How did it come about?

Beginning with Leonardo Da Vinci in the late 1400s, and Bernard Palissy 100 years later, modern scientists pieced together how the water cycle works. Finally in the 1600s, two Frenchmen, Pierre Perrault and Edmé Mariotte, showed that there was enough water from evaporation and rain to explain how water reached the land and then flowed back to the sea.



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How Does it Affect Weather?

The water cycle can affect the wind. While the ocean and areas of land are the prime drivers of wind, water in the atmosphere stores heat, which can create and redirect it. Wind patterns are complex, and the water cycle plays an important role.

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How Does it Affect Weather?

Weather is largely driven by warm masses of air interacting with cold masses, and the water cycle has a major impact on air temperature. Solar energy is absorbed from the ocean, and this evaporated water brings heat with it. This heat increases the power of tropical storms, and many would fizzle out if not for the water cycle.

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How Does it Affect Weather?

Large lakes also have an influence on local weather by serving as buffers, mitigating hot and cold temperatures. Without the water cycle, freshwater lakes would drain over time, and they rely on regular rainfall to stay filled.

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How Does it Affect Climate?

-Increased Precipitation:

- Creates more clouds
- Leads to severe weather
- Affects of climate change due to precipitation: Increased humidity and can lead to more floods.

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