Earth Science at Your Fingertips

my NASA data

FLIPBOOK SOLAR RADIATION

https://mynasadata.larc.nasa.gov/

NASA thinks you will "flip out" with this hands-on visualization!

NASA visualizers take data – numbers, codes – and turn them into animations people can see and quickly understand. You can become a data visualizer by creating your own flipbook animations using maps of science variables that NASA scientists commonly study to better understand the Earth System. Each frame in this flipbook shows monthly averages collected in 2016 and 2017. There are six flipbooks available for different science variables: aerosols, cloud coverage, vegetation concentrations, precipitation, incoming solar radiation, and surface temperature. Please visit our website for more information.

The processes in the Earth System take place in and between the Atmosphere, Cryosphere, Hydrosphere, Biosphere, and Geosphere, as well as include energy from the Sun. As we can see, Earth System processes are not bound by oceans, mountains, or country delineations–they are truly global in scope!

ESSENTIAL QUESTIONS:
- What do the colors in the flipbook represent?
- How does this variable change over time?
- Why do you think these changes occur?
- What is affected by these changes?

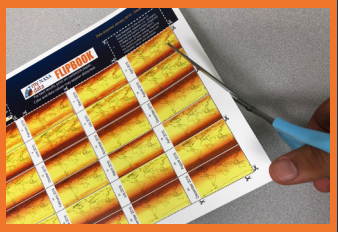
MATERIALS NEEDED:


Binder clip


Scissors


Copier Paper

INSTRUCTIONS

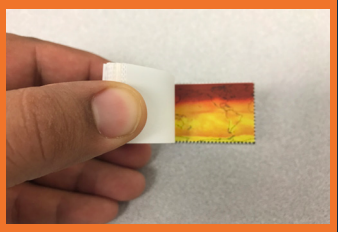


1 **PRINT** flipbook on cardstock.

2 **CUT** cardstock along the dotted line, making 26 frames.

3 **STACK** the 26 frames in order. The frames are numbered.

4 **CLIP** the stack of frames together, with the binder clip.



5 **FLIP** through the stack quickly. Watch and enjoy the animation.

NP-2019-10-090-LaRC

1 CLIP HERE

my NASA data FLIPBOOK

https://mynasadata.larc.nasa.gov/

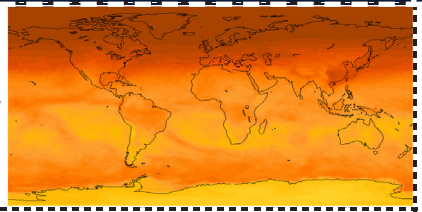
0 600

my NASA data FLIPBOOK

For best results, print on cardstock paper.
Color and data values may appear distorted.

2 Solar Radiation is the amount of incoming solar radiation (i.e., sunlight) reaching the Earth's surface measured in Watts per square meter (W/m²). The amount of solar energy reaching the Earth's surface varies due to air molecules, cloud, and aerosols. (CERES EBAF)

3 January 2016



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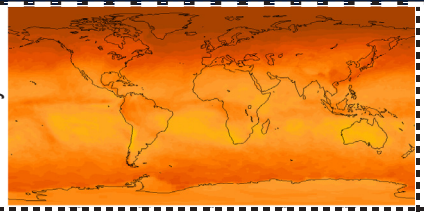

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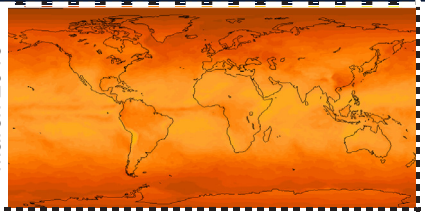

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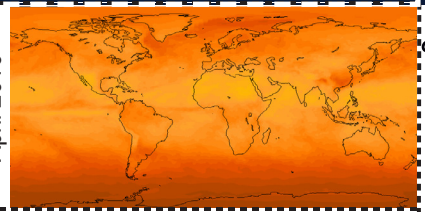

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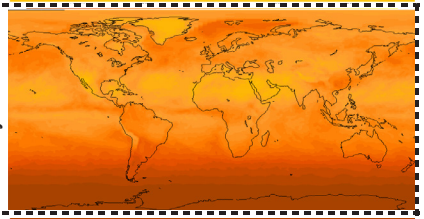

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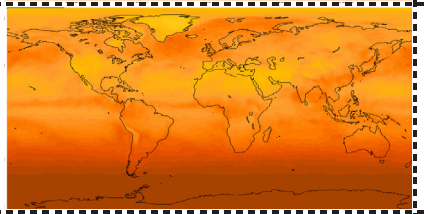

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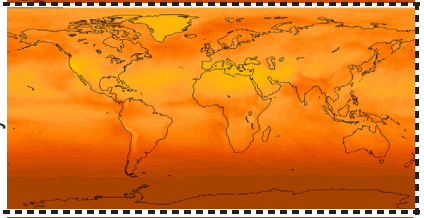

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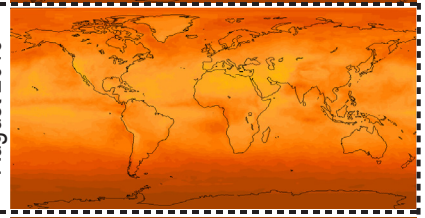

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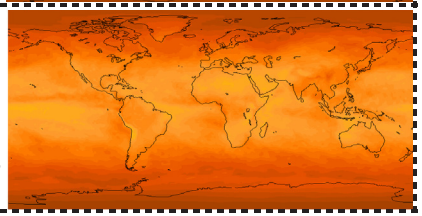

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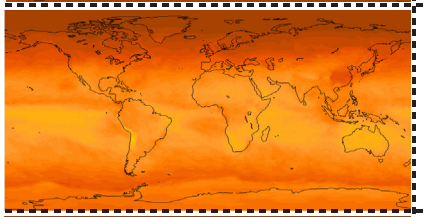

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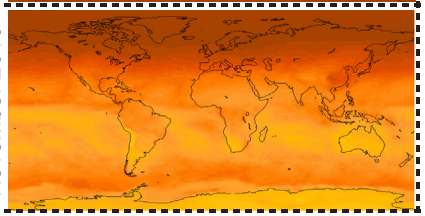

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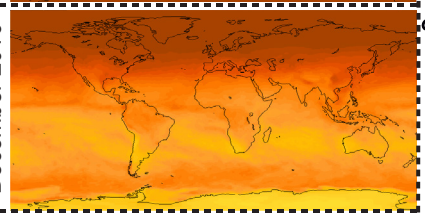

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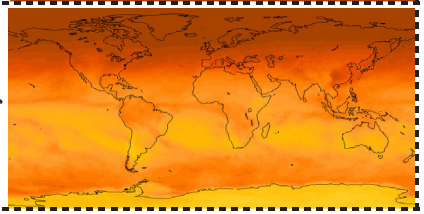

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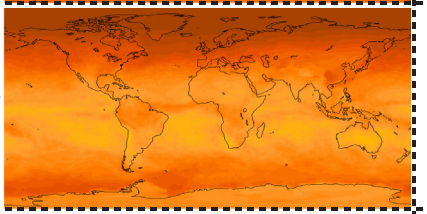

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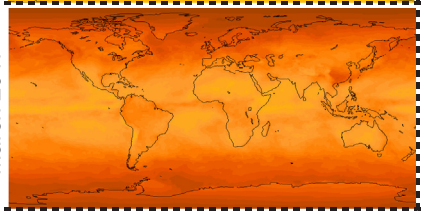

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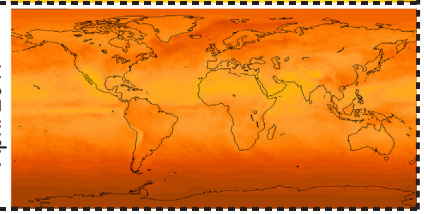

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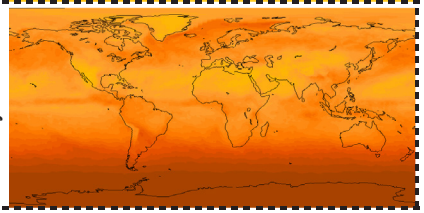

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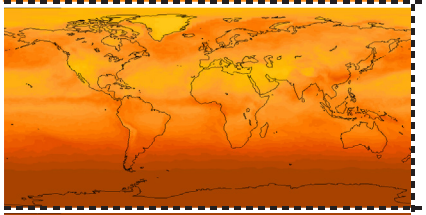

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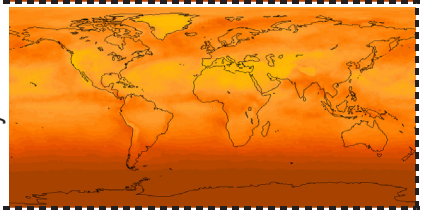

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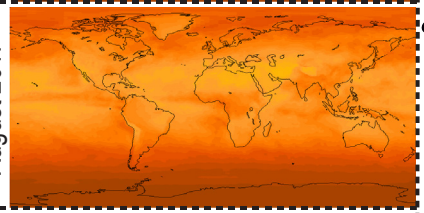

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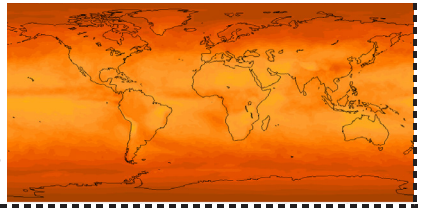

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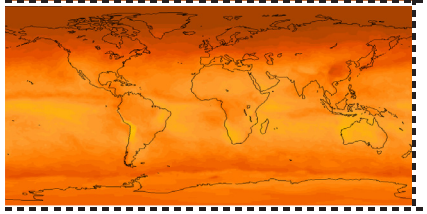

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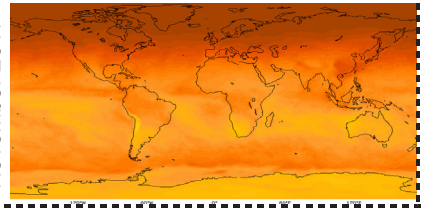

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