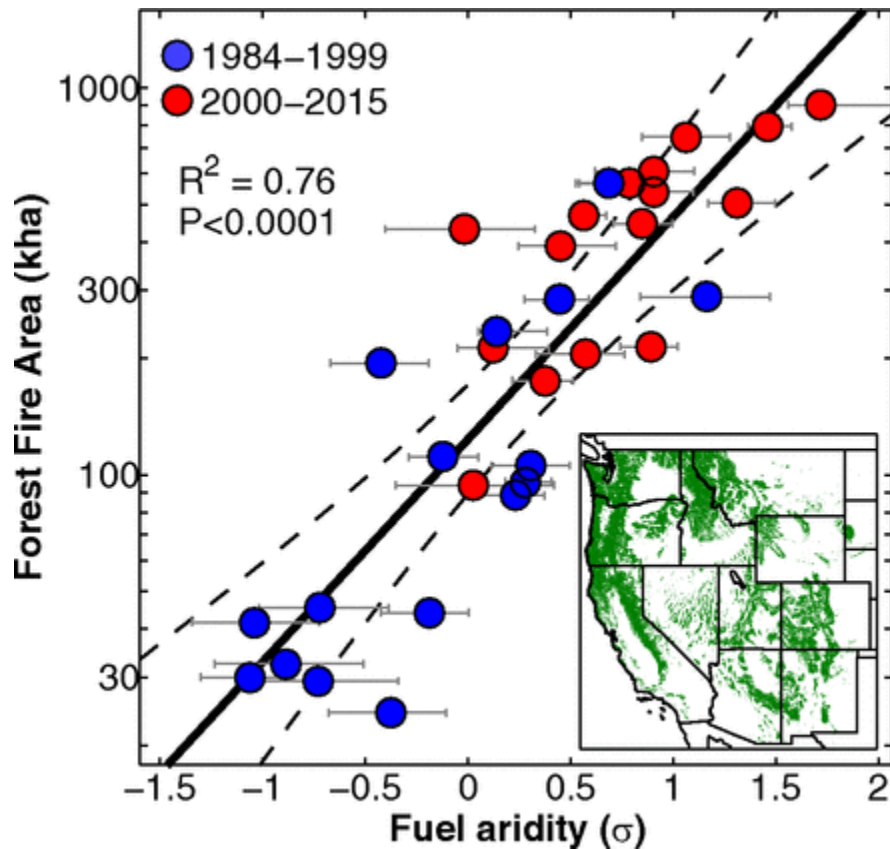


How Climate Change Affects The World

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Wildfires:

- **Global warming causes there to be less soil moisture which causes things to burn down easily.**
- **According to WMO, dry vegetation in hot regions can light up easily which causes more frequent and bigger wildfires.**
- **In a 2016 study by PNAS they found that double the amount of forests had burned in Western US between 1984 and 2015 due to climate change.**



Hurricanes:

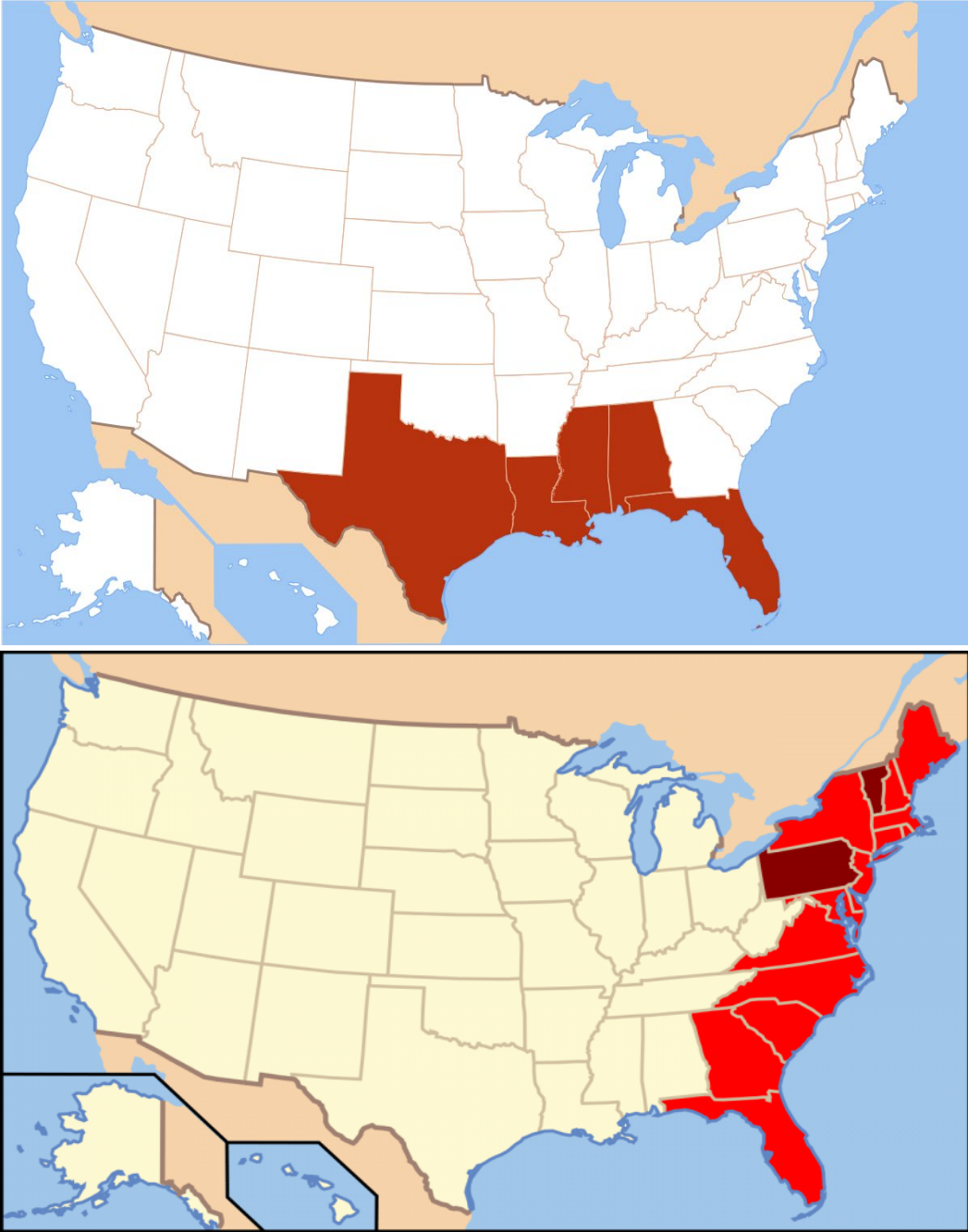
- As the planet is warming, the atmosphere is able to hold more moisture that causes pouring rain.
- As a cause of pouring rain and storms, more deaths, destruction and damage occur.
- Stronger storms of categories 3,4 and 5 will become more frequent and will bring more damage.
- Due to warmer climates and warmer waters, hurricanes will become slower and stronger
- We are more likely to experience more cyclones in the next decade because warm water fuels hurricanes.

- So, as the oceans and air heat up, tropical storms will get more intense, stronger and slower.
- As a result of slower storms, there is more time for forceful winds, heavy rain, and tides to cause more destruction.

Rising Heat Temperatures Affect Water

- The Earth's temperature is rising due to global warming. This is causing water to evaporate out of the soil and into the air making plants that need it suffer from no moisture.
- The average moisture level in soil is decreasing due to higher temperatures leaving less water for living things.
- Ice caps all over the world will keep melting and crucial ice sheets might completely disappear.
- Warm periods cause meltdown, but recently warmer periods cause significant meltdown which cool periods can no longer regenerate, it just pauses it.
- On average, meltdowns will lead to sea-level risings of about 0.3-0.6 ft globally by 2030.
- Sea-level rising will cause flooding. In 2018 the US Northeast median was one flood per year, but by 2030

the median will be five floods per year mainly affecting the US Gulf and East Coasts.



Rising Heat Temperatures

- Fossil fuels contain carbon dioxide and methane. Burning these fossil fuels for energy releases them into the atmosphere causing them to accumulate and heat up the Earth.
- “According to the IPCC, the world's carbon emissions have to fall by 45% by 2030 to keep the world's average temperature from rising more than 1.5 degrees Celsius above pre-industrial levels.”
- Scientists believe if the Earth warms more than 1.5 degrees Celsius, ecosystems could collapse.
- About 55% of the world's oceans will suffer.
- Marine life will be forced to mass migrations, and many species will not be able to adapt, therefore, they will die off.
- World Bank reports that the climate crisis will push 100 million people into poverty by 2030 due to the fall of global crop yields (5% fall). Food will become limited causing prices to rise.

Who is affected?

- Everyone will be affected from climate change.
- Those living on the coast will experience hurricanes and sea-level rising.

- Those living in the Western US will see intense and faster spreading wildfires which will eventually cause droughts
- Throughout the US, heat waves and flooding are already happening and will continue to do so

What can be done?

- By 2030, annual emissions need to be half of what they are now.
- The world needs to make a change from fossil fuels to renewable energy which includes transportation and the way we produce food.
- Waste less food. Spoiled or disposed food creates methane which pollutes the air.
- Eat less factory--farmed meat. Factory farms do not feed their cows a natural diet. Instead, they are fed grains which causes them to release methane into the air. We can replace factory-farmed meat with organic farmed meat since they feed their cows a natural diet.
- Use less energy and water. We can do this by shortening our showers, using low-flow shower heads and faucets, and washing full loads of clothes at once. We can lessen our energy use by turning off

lights, switching to LED lights, and reducing the amount of technology we use.

Climate change is affecting everyone whether we realize it or not. Not only are we being affected, but entire ecosystems as well. Climate change brings along natural disasters that affect communities and resources and many more negative things. We have very limited time to make a change if we don't want our world as we know it to drastically change. By this I mean food shortages, droughts, poverty, etc. We are already seeing multiple wildfires spreading and burning land that could be used for crops. We are seeing our ice caps melting and rising our sea-levels which lead to floodings. Rising temperatures will affect not only us, but our marine life as well. As a society we must work together to make a change and improve our world.

Citations:

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