



## **Increasing climate extremes under global warming – What is the driving force?**

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More climate extreme events have occurred in recent years, including the continual development of extreme drought in California, the severe cold winters in the eastern U.S. since 2014, 2015 Washington drought, and excessive wildfire events over Alaska in 2015. These have been casually attributed to global warming. However, a need for further understanding of mechanisms responsible for climate extremes is growing. In this presentation, we'll use sets of climate model simulation that designed to identify the role of the oceanic feedback in increasing climate extremes under global warming. One is with a fully coupled climate model forced by 1% ramping CO<sub>2</sub>, and the other is with an atmosphere only model forced by the same CO<sub>2</sub> forcing. By contrasting these two, an importance of the oceanic feedback in increasing climate extremes under global warming can be diagnosed.