



WEATHER ON STEROIDS: THE ART OF CLIMATE CHANGE SCIENCE

Weather on Steroids explores the consequences, challenges, and opportunities that arise from the changing climate on our planet. The exhibition partners artistic and scientific communities to create a visual dialogue about the vexing problem of climate change, and explores how weather variability affects the day-today life of local communities. The exhibition investigates Southern California vulnerability to climate change, and draws on the region's scientific expertise at the Scripps Institution of Oceanography, whose investigators are at the forefront of climate research. Weather on Steroids brings together artists and scientists to reflect on humanity's role in our changing climate and to envision new possibilities for a sustainable future. The focus is on weather extremes fueled by the steroids of climate change and their impacts on society: heat waves, atmospheric rivers, and drought with impacts on health and agriculture; deluges, sea level rise, and coastal erosion; extreme winds and devastating wildfires. Science serves as a basis and inspiration for imaginative and creative responses from artists. Artists' subjective images and scientists' objective scientific results reveal how climate change upsets the planet's balance with extreme weather impacts. By illuminating the reality of climate change, Weather on Steroids aspires to take a proactive local role to engender collaboration between art and science for the benefit of cross-disciplinary and public education.

https://lajollahistory.org/exhibitions/current-exhibitions/

11 artists and 11 scientists collaborated, usually 1-1, to produce *Weather on Steroids*



Global warming, includes trends in climate extremes (e.g. drought) and extreme weather events (e.g. heat waves, floods, hurricanes, atmospheric rivers) that are devastating and locally felt. These changing extremes can register climate change acutely in our individual experiences. Yet the connection of regional weather extremes to global climate change is somewhat like the connection of an athlete's performance in an individual sports event to her use of steroids. The steroids are only a partial and obscure cause of any individual outcome, yet their impact is evident in the statistics of the athlete's performances over an entire season, especially when compared to pre-steroid seasons' statistics.

(photos by Alexander Gershunov)

Atmospheric Rivers

Was produced for the Exhibition from mixed media, recycled and repurposed materials, by Oscar Romo in consultation with CW3E's Alexander Gershunov. It is one example of CW3E's research inspiring art and contributing to *Weather on Steroids*. Each installation at the Exhibition is accompanied by 2 didactic panels: one from the artist and one from the scientist. Excerpts of the panels follow.

"...Made of repurposed materials, Romo's piece symbolizes Nature's power. Wind and moisture manifest kinetic/male and latent/feminine energy that together represent creation or creativity that we are learning to harness in ever-greater amounts. Rather than induce a negative perception of the subject, Romo, as a practitioner of "natural systems design", argues that resilience can be accomplished through the understanding of nature and its remarkable ability to adapt and the human capacity to learn from the natural world. Repurposed objects in the installation communicate a concern over our excessive use of energy and massive generation of waste but also demonstrate an opportunity for us to become more efficient and respectful of our natural resources by reducing, recycling, reusing and recovering goods." (from didactic panel by Oscar Romo)

"...The extreme rainfall that ARs can produce in California over a couple of days is similar to the rainfall amounts associated with land-falling hurricanes of the East and Gulf coasts. ARs provide much of the precipitation to California and they drive the volatile water resources in our State, but they do so in spurts, and so can cause floods, landslides and avalanches. In a warming climate, ARs are expected to carry more water vapor. ARs are the mechanisms that will produce many of the stronger precipitation extremes that are projected for our region by climate models. Extreme precipitation events are also expected to be warmer in the future and to produce a much larger proportion of rain compared to snow, further enhancing their potential to cause catastrophic floods and be less amenable to regulated water storage in reservoirs." (from didactic panel by Alexander Gershunov)

On Romo's Globe, continents are made from bicycle sprockets. Tropical moisture and atmospheric rivers (ARs) are represented by the bottoms of bottles collected from the Tijuana River. The Globe is directly exposed to landfalling ARs and is designed to rotate and rust as it catches wind and moisture.