Science Discussion Series: Climate Change is in the news so let's talk about it! We're experts in climate science and science communication, let's discuss!

ScienceModerator¹ and r/Science AMAs¹

¹Affiliation not available

April 17, 2023

Abstract

Hi reddit! This month the UN is holding its Climate Action Summit, it is New York City's Climate Week next week, today is the Global Climate Strike, earlier this month was the Asia Pacific Climate Week, and there are many more local events happening. Since climate change is in the news a lot let's talk about it! We're a panel of experts who study and communicate about climate change's causes, impacts, and solutions, and we're here to answer your questions about it! Is there something about the science of climate change you never felt you fully understood? Questions about a claim you saw online or on the news? Want to better understand why you should care and how it will impact you? Or do you just need tips for talking to your family about climate change at Thanksgiving this year? We can help! Here are some general resources for you to explore and learn about the climate: AAAS just released a report with case studies and videos of how communities and companies (and individuals) in the US are working with scientists to respond to climate change called "How We Respond." NASA: Vital Signs of the Planet National Academies of Sciences: Climate Change Evidence and Causes National Geographic: Seven things to know about Climate Change Today's guests are: Emily Cloyd (u/BotanyAndDragons): I'm the director for the American Association for the Advancement of Science Center for Public Engagement with Science and Technology, where I oversee programs including How We Respond: Community Responses to Climate Change (just released!), the Leshner Leadership Institute, and the AAAS IF/THEN Ambassadors, and study best practices for science communication and policy engagement. Prior to joining AAAS, I led engagement and outreach for the Third National Climate Assessment, served as a Knauss Marine Policy Fellow at the National Oceanic and Atmospheric Administration, and studied the use of ecological models in Great Lakes management. I hold a Master's in Conservation Biology (SUNY College of Environmental Science and Forestry) and a Bachelor's in Plant Biology (University of Michigan), am always up for a paddle (especially if it is in a dragon boat), and last year hiked the Tour du Mont Blanc. Jeff Dukes (u/Jeff_Dukes): My research generally examines how plants and ecosystems respond to a changing environment, focusing on topics from invasive species to climate change. Much of my experimental work seeks to inform and improve climate models. The center I direct has been leading the Indiana Climate Change Impacts Assessment (INCCIA); that's available at IndianaClimate.org. You can find more information about me at https://web.ics.purdue.edu/~jsdukes/lab/index.html, and more information about the Purdue Climate Change Research Center at http://purdue.edu/climate. Hussein R. Sayani (u/Hussein_Sayani): I'm a climate scientist at the School of Earth and Atmospheric Science at Georgia Institute of Technology. I develop records of past ocean temperature, salinity, and wind variability in the tropical Pacific by measuring changes in the chemistry of fossil corals. These past climate records allow us to understand past climate changes in the tropical Pacific, a region that profoundly influences temperature and rainfall patterns around the planet, so that we can improve future predictions of global and regional climate change. Jessica Moerman (u/Jessica_Moerman): Hi reddit! My name is Jessica Moerman and I study how climate changed in the past - before we had weather stations. How you might ask? I study the chemical fingerprints of geologic archives like cave stalagmites, lake sediments, and ancient soil deposits to discover how temperature and rainfall varied over the last several ice age cycles. I have a Ph.D. in Earth and Atmospheric Sciences from the Georgia Institute of Technology and have conducted research at Johns Hopkins University, University of Michigan, and the Smithsonian National Museum of Natural History. I am now a AAAS Science and Technology Policy Fellow working on climate and environmental issues. Our guests will be joining us throughout the day (primarily in the afternoon Eastern Time) to answer your questions and discuss!

REDDIT

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NASA: Vital Signs of the Planet

National Academies of Sciences: <u>Climate Change Evidence and Causes</u> National Geographic: <u>Seven things to know about Climate Change</u>

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