

Abstract: NOAA's State Climate Summaries for the National Climate Assessment: A Sustained Assessment Product

Sarah M. Champion¹, David R. Easterling², Rebekah Frankson¹,
Jessicca Griffin¹, Kenneth E. Kunkel¹, Jennifer D. Runkle¹, Laura E.
Stevens¹, Brooke C. Stewart¹, Liqiang Sun¹, Sara Veasey²

¹*Cooperative Institute for Climate and Satellites – NC (CICS-NC), North Carolina State University, 151 Patton Avenue, Asheville, NC*

²*NOAA's National Centers for Environmental Information (NCEI), 151 Patton Avenue, Asheville NC*

A set of State Climate Summaries have been produced for all 50 U.S. states as part of the National Climate Assessment Sustained Assessment and represent a NOAA contribution to this process. Each summary includes information on observed and projected climate change conditions and impacts associated with future greenhouse gas emissions pathways. The summaries focus on the physical climate and coastal issues as a part of NOAA's mission. Core climate data and simulations used to produce these summaries have been previously published, and have been analyzed to represent a targeted synthesis of historical and plausible future climate conditions. As these are intended to be supplemental to major climate assessment development, the scope of the content remains true to a "summary" style document. Each state's Climate Summary includes its climatology and projections of future temperatures and precipitation, which are presented in order to provide a context for the assessment of future impacts. The climatological component focuses on temperature, precipitation, and noteworthy weather events specific to each state and relevant to the climate change discussion. Future climate scenarios are also briefly discussed, using well-known and consistent sets of climate model simulations based on two possible futures of greenhouse gas emissions. These future scenarios present an internally consistent climate picture for every state and are intended to inform the potential impacts of climate change. These 50 State Climate Summaries were produced by NOAA's National Centers for Environmental Information (NCEI) and the North Carolina State University Cooperative Institute for Climate and Satellites – NC (CICS-NC) with additional input provided by climate experts, including the NOAA Regional Climate Centers and State Climatologists. Each summary

document also underwent a comprehensive and anonymous peer review. Each summary contains text, figures, and an interactive web presentation. A full suite of the comprehensive analyses and metadata are also available. The audience is targeted as both decision-makers and informed non-scientists. This presentation will discuss the scientific development for the project, demonstrate the suite of information, and provide examples of noteworthy figures from select states.