

Chris Karstens

Techniques Development Meteorologist Storm Prediction Center

Chris Karstens has been a Techniques Development Meteorologist at SPC since 2017 and previously worked with the University of Oklahoma Cooperative Institute for Mesoscale Meteorological Studies for five years.

His research involves developing a variety of tools that allow SPC forecasters to do their job better, and plays a key role in transitioning and supporting such tools for daily use by SPC forecasters. His interests include application of SPC products and information residing within the watch/warning gap and working with both the physical and social science research communities in those efforts.

Dr. Karstens has served as an Affiliate Associate Professor with the OU School of Meteorology since 2016. He is a co-investigator on several grants related to social and behavioral science and represented the SPC at a research to operations workshop for social and behavioral science. He also serves as a reviewer for several articles submitted for formal publication each year.

Chris has been involved in the American Society of Civil Engineers Wind Speed Estimation in Tornadoes Standards Committee since 2014 as a steering committee member, voting member and subcommittee chair.



Karstens has several memorable shifts. The first are May 20 (high risk) and May 22 (moderate risk) in 2019. He wrote several mesoscale discussions highlighting the tornado/hail potential for areas of the Central and Southern Plains, assisting the lead and mesoscale forecasters with the forecasting challenges presented on those days. On 10 August 2020 he worked the Iowa derecho, handling MCDs and watch updates in peripheral areas to the main corridor of high winds. He said he gained an immense appreciation of the forecasting challenges and the skill of the experienced forecasters at SPC in raising the risk to the public to an appropriate level with as much advance notice as possible.

Chris has authored or co-authored 117 papers published in professional journals and conference presentations, and has implemented and developed two algorithms in use at the SPC.

He received Bachelor, Masters and Doctoral degrees in meteorology and a graduate certificate in GIS from Iowa State University.

“Difficulty is what wakes up the genius” – *Antifragile: Things That Gain From Disorder* by Nassim Taleb

“The greatest obstacle to knowledge is not ignorance; it is the illusion of knowledge” - Daniel Boorstein

