

**Brett McDonald**  
**Science and Operations Officer**  
**National Weather Service**  
**Riverton, Wyoming**



**Biography:** Brett McDonald earned his BS, Ph.D. in Meteorology from the University of Utah. He is currently the Science and Operations Officer with the National Weather Service office in Riverton, Wyoming and an Adjunct Professor with Central Wyoming College in Riverton, Wyoming. Since middle school, Brett has always wanted to be involved with the weather, combining a passion for science and math. He enjoys observing, forecasting, and researching the weather of the western United States. He has also taught online weather and climate classes at CWC for over 10 years and loves visiting school classrooms to help others learn about the atmosphere. Lately, Brett has led the Meteorology event at the WY Science Olympiad competition and helped shape current weather and climate science standards for WY public schools. He loves living in Wyoming to enjoy the beauties of the mountains.

**Workshop:** *Weather and Climate of Wyoming: Observing, Understanding, and Applying* - The basics of weather and climate will be shared, especially regarding the role of math and core physical science in understanding the atmosphere. I will use a combination of presentation slides and activities to help attendees solidify their understanding and challenge them to look further into atmospheric and climate science. Possible activities will include a quiz on meteorological instruments, practice drawing isobars on a surface map, decoding the surface station model, evaluating upper air soundings from a Riverton Wyoming balloon launch, computing daily and monthly average temperatures to compare with current climate trends, & analyzing current and forecast weather maps.