Weather Report Accuracy

The core driving question for this entire project was "How accurate are the weather reports that we trust daily?". To truly answer this question I've determined that I'd need months of data spanning more than one seasonal transition (my data just barely tapped the transition from Fall to Winter in 2008) and data that is collected 24/7 (which due to certain limitations on the RCX hardware I can't securely do).

But even with the inconclusive data I can conclude this project with a very complex explanation. Here's that explanation: You can't live in the same place as where the weather is tracked! Therefore you only end up getting weather that is accurate as of the nearest airport (with the core exception of Personal Weather Stations that contribute to WeatherUnderground). In such a situation the current weather near you will be slightly off from the weather where the data is tracked. The weather reports may be correct for where the data comes from and very far off for the weather where you're standing.

So, the question of weather report accuracy remains an underlying question to this project that can't be answered definitively. That may even be the case with months of data. I'll consider my conclusion that the data is inconclusive and that the question itself may have been one that can only be answered with pondering that reveals the above complex answer and not a question capable of a straight answer.