

Do similar stations get the weather wrong in similar ways?

Most weather forecasts do not come directly from weather models, but are based on Model Output Statistics (MOS). Weather forecasters often adjust model forecasts based on their expertise with the local terrain and climate. Building on previous work processing this dataset, the aim of this project is to explore if these adjustments follow a predictable pattern. Over the summer, students will compute the errors in the MOS forecast, use exploratory data analysis techniques to identify a common signature for errors, and then use clustering and classification to explore if error types are prevalent amongst similar types of stations. The work will primarily be done using the Python programming language will utilize modern technologies like scalable analytics and distributed computing libraries, and possibly cloud-based web services.