Why Python?

There are many different computer programming languages that can do many things, so why Python to analyze and visualize weather data? We'll Python has been around since the late 1980s and grew in popularity through the 1990s. In the early 2000s the scientific community began to adopt the language through building complementary packages that supported the types of work they were doing. This led to the development of packages to handle numeric arrays and create high-quality graphs of data. Over the past fifteen years with the advent of easy to use Python package management, an explosion of niche packages has come along to make doing science easier by adding calculation, analysis, and visualization tools to the Python ecosystem and has largely become the default programming language for many disciplines, including atmospheric science.

However, Python can't solve everything. For example, the core of numerical weather prediction models are still based in Fortran or C code, as the advantages of those compiled languages and long-tested codes are the right tool for the task.