

Statistical Analysis of NASA's Collection 6 Snow Product

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Data science is about combining statistical methods, hacking skills and data visualization and combining it to understand the patterns in a data set. NASA has just produced a new data set, collection 6, which updates reprocesses and updates all the algorithms they apply to the Moderate Resolution Imager on the Aqua and Terra Satellites. For example, one data product, the snow product is important for studying climate change and is an important input to weather models. It tells us how much snow is on the ground particularly in remote areas where only satellites can monitor it. But how different are the results using collection 6 over collection 5? Are they really any better? Do the new algorithms agree any more with what we see at weather stations? Learn to use data science tools in python, work with satellite images and visualization tools to create the evaluation of this critical new NASA product.