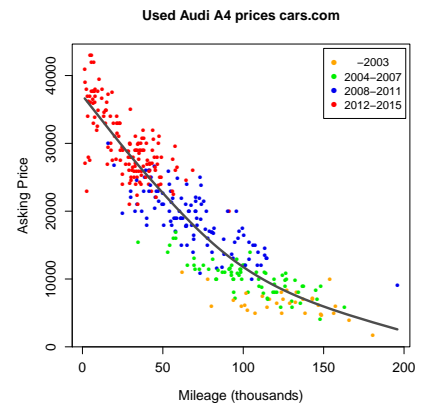


# Introduction to Data Analysis with R

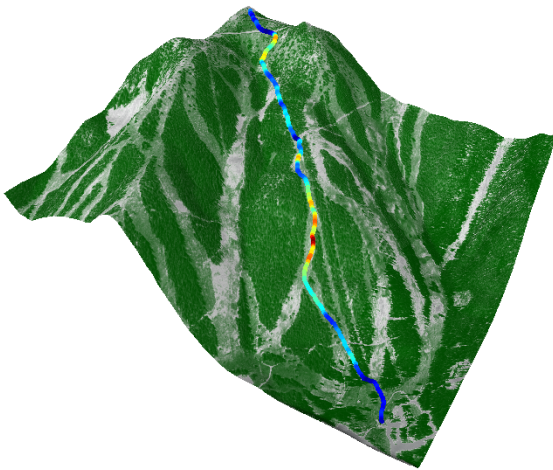
APPM 2720 Mon, Wed, 3 - 4:15 PM, Spring 2016.  
Douglas Nychka, Affiliate Faculty, Applied Mathematics  
nychka@ucar.edu

*Data science* is a new field that combines mathematics, computer science, and statistics with the goal of answering questions and discovering new information from data.

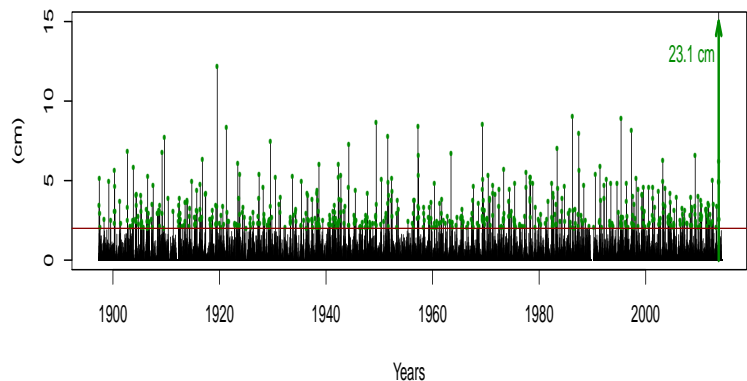
- How should I buy a used car on cars.com?
- Where is the steepest part of a ski slope?
- How is the climate changing in Colorado?
- When will the next flu outbreak occur?
- What web pages have similar content?



Degree of slope for Riflesight Notch Trail  
Mary Jane, Colorado



Daily precipitation amounts for Boulder



This course will expose students to practical data analysis and statistics. In the process students will learn how to write programs in the R language and generate figures and reports. R is a flexible language similar to Matlab and python, is fun to use, and is good for learning how to program. The course will also introduce students to modern data analysis tools including regression and smoothing, multivariate analysis, clustering, spatial prediction and image analysis.