

Summary of lectures on the topic of  
"Data Analytic and Empirical Forecasting Methods using Smart Linear Regression"  
by Prof. Don McNeil

The lectures focused on applying basic data analytic methods to daytime land surface temperature remote sensing data collected by Earth-orbiting satellites between March 2000 and February 2021. The methods largely focused on fitting daytime land surface temperature trends using a 3-knot natural cubic spline and providing estimates of future patterns up to 7 years ahead. Data from seven years ago was used to project the next seven years, resulting in predicting error boundaries. To make the visual display of the results easier, the R program and related packages were employed.

The methodologies presented in these lectures need to be thoroughly evaluated and improved utilizing NASA's global climate data. For additional information, participants can contact Prof. Don McNeil at [don.mcneil@mq.edu.au](mailto:don.mcneil@mq.edu.au).