SYSTEMS DESIGN ENGINEERING

Introduction to Data Assimilation

SYDE 730 topic 11 **Winter**

This course will cover both theoretical and practical topics in data assimilation. There will be a focus on fundamentals and new directions, such as, variational data assimilation, Kalman, filter methods, and Ens-Var, which will be highlighted through discussion of the literature. Some of the practical issues which arise in the implementation of a data assimilation methodology, such as observation quality control, bias correction, and system diagnostics, will be illustrated using examples.

Instructor: A. Scott

Email: ka3scott@uwaterloo.ca