

The RAL Seminar Series



NCAR

Image Warping for Forecast Verification

by

Johan Lindstrom

*Mathematical Statistics, Centre for Mathematical Sciences
Lund University
Lund, Sweden*

***Tuesday, June 3, 2008
Foothills Lab Building 2, Room 1022
10:45 a.m.***

A method for forecast verification using image warping will be presented. Image warping based on thin plate splines is used to deform forecast fields to match observation fields. The warping approach gives an estimate of the location errors in the forecast, as well as the residual amplitude errors. The statistical formulation of the image warping problem should also provide (approximate) confidence intervals for several features of the deformation; Such as global translation, global rotation and the reduction in the amplitude error that the warping deformation gives rise to, i.e.~how much better than the original forecast the deformed forecast is.

The talk will give a brief background to image warping, followed by a description of our verification method. Possible extensions, issues and limitations will also be discussed.