



JOINT GFDI & KARST WATER CENTER COLLOQUIUM

Title

"Statistical Tools for Wakulla Spring Flow"

Speaker

Dr. Eric Chicken

Department of Statistics
Florida State University

Time and Place

3:30 p.m. on Monday, November 6, 2006
GFDI Reading Room, 18 Keen Bldg.

Abstract:

The discharge at Wakulla Spring is a complex combination of signals from multiple sources: turbulence, tides, rainfall, sinking streams, base flow, etc. We use a variety of statistical tools to separate and estimate these sub-signals within the discharge. For the tide and turbulence signals, we use the statistical properties of wavelets to separate them from the composite discharge signal. We are also interested in estimating the base flow signal at the spring. Here, we make use of statistical maximum likelihood estimation techniques to model the base flow at the spring. The methods presented are examined on both real and simulated spring discharge data.

Refreshments will be served at 3:15PM