UNIVERSITY OF SYDNEY

SCHOOL OF MATHEMATICS AND STATISTICS

Statistics Seminar

Wednesday 20 April, 4.00pm

Carslaw 452

Efficient Estimation in Multiparameter Local Likelihood Models

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Abstract

Recently, there is an increasing interest in employing multiparameter likelihood models to investigate trends in sample extremes in environmental statistics. When sample maxima or exceedances are modeled by multiparameter local likelihood, the sample size is not large in general. We provide techniques to improve efficiency of the inference. The asymtptotic bias is unchanged and the asymptotic variance is reduced by a constant factor. The proposed methods are applied to analyze the annual maximum temperatures measured at Station De Bilt, the Netherlands.

Enquiries about the Statistics Seminar should be directed to Marc Raimondo: `marcr@maths.usyd.edu.au`