STATISTICAL SCIENCE

Volume 18, Number 4

November 2003

| Statistics and the Environment | |
|---|-----|
| Introduction to the Special Section on Statistics and the Environment | 411 |
| Three Environmental Probabilistic Risk Problems | 412 |
| Statistics in Atmospheric Science | 422 |
| Uncertainty and Climate Change | 430 |
| Spatial Statistics in the Presence of Location Error with an Application to Remote Sensing of the Environment <i>Noel Cressie and John Kornak</i> | 436 |
| Geographic and Network Surveillance via Scan Statistics for | |
| Critical Area Detection | 457 |
| Epidemiologically Based Environmental Risk AssessmentLouise Ryan | 466 |
| A Conversation with Abdel H. El-Shaarawi | 481 |
| Two Papers on Genetics | |
| Graphical Models for Genetic Analyses Steffen L. Lauritzen and Nuala A. Sheehan Discovering Disease Genes: Multipoint Linkage Analysis via | 489 |
| a New Markov Chain Monte Carlo Approach | 515 |

Statistical Science (ISSN 0883-4237), Volume 18, Number 4, November 2003. Published quarterly for \$80 per year by the Institute of Mathematical Statistics, 3163 Somerset Drive, Cleveland, OH 44122, USA. Periodicals postage paid at Cleveland, Ohio and at additional mailing offices. **POSTMASTER:** Send address changes to Statistical Science, Institute of Mathematical Statistics, Dues and Subscriptions Office, 9650 Rockville Pike—Suite L2310, Bethesda, MD 20814-3998, USA.

Copyright © 2003 by the Institute of Mathematical Statistics Printed in the United States of America