RAMAS-CAST

Model Uses   RAMAS-CAST provides functionality for the display and statistical characterization of disease clusters.

Major Categories	Population Modeling	**Subject Knowledge Level** Intermediate
Minor Categories	Disease	**Technical Difficulty Level** Intermediate
Model Type	Conceptual Model	**Geographic in Nature?** No

Abstract
RAMAS CAST is a program for the display and statistical characterization of disease clusters. Diseases such as cancer are often clumped together either in terms of their incidence in time or their distribution across space in ways that suggest a common environmental cause or a particular contagion process. However, humans are likely to perceive clusters even in purely randomly distributed data. The statistical problem is to determine whether there exists an excess of disease incidence - a cluster - above what might be expected by chance alone. Clustering within RAMAS-CAST may exist in time, or in space, or in both space and time. CAST blends three-dimensional graphical displays and state-of-the-art statistical methods to fully describe a suspected cluster in space or time. Supported test include Knox, Mantel, Ederer-Meyer-Mantel, nearest neighbor, and a variety of other methods.

Future Developments   **Model Limitations**
Unknown   Unknown

Model Features
- 3-Dimensional graphical displays
- Statistical models
- Tests include: Knox, Mantel, Ederer-Meyer-Mantel, nearest neighbor, and others

Required Data Types   **Model Outputs**
Data input is based on a menu-screen system with user-prompted questions.   Unknown

Hardware Requirements
IBM PC, XT, AT or PC/2, 640 KB RAM, hard drive, math coprocessor (optional); EGA or VGA monitor; DOS 2.0 or higher

Supported Platforms

DOS	☒	**UNIX**	☐
Windows	☒	**Macintosh**	☐

Software Requirements
None noted

Cost, Licensing and Availability
$895 – Available from link below

Source
RAMAS Environmental Software

Source URL
http://www.ramas.com/ramas2.htm#cast