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- 2000: Volume XI, Number 2. Zipped file. After unzipping, click on index.html to launch the file in an internet browser. Summary and Full pdfs, open in Adobe Acrobat Reader 7.0 or later. External link.

ARTICLES, NOTES, AND OTHER: To the Memory of Donald Frederick Lach, 1917-2000, Dedication | Photo Essay, Fifty Years of Spatial Analysis: A Symposium in Honor of William L. Garrison 1950-2000 (J. D. Nystuen) | A Neighborhood Information System within Ann Arbor, Michigan (S. Arlinghaus and L. Phillips) | Animaps, Again (C. Gober) | Animap Sequences (High-speed connection recommended) (N. Baird)

- 1999: Volume X, Number 1

ARTICLES, NOTES, AND OTHER: Dedication To John D. Nystuen, on the occasion of his retirement from The University of Michigan | Metropolitan Mining: Institutional and Scale Effects on the Salt Mines of Detroit (J. Nystuen) | Animaps III: Color Straws, Color Voxels, and Color Ramps (S. Arlinghaus and W. C. Arlinghaus) | Book Review: Andre I. Khuri, Thomas Mathew, and Bimal K. Sinha, Statistical Tests for Mixed Linear Models, John Wiley \& Sons, 1998, 352 pp., \$69.95 (cloth) (R. Wallace) | Book Review: Castells, Manuel (1996). The Rise of the Network Society (The Information Age: Economy, Society and Culture, Volume 1). Malden, MA: Blackwell Publishers, Inc. ( 556 pages, bibliography 51 pages, index 23 pages) (S. Iyer).

## - 1999: Volume X, Number 2

ARTICLES, NOTES, AND OTHER: Listening to Raindrops, (J. A. Nystuen) | A Map of Jackson, Mississippi (S. Arlinghaus) | Books Received; Brief Summaries: Julius S. Bendat, Nonlinear Systems Techniques and Applications; Paul M. DeRusso, Rob J. Roy, Charles M. Close, Alan A. Desrochers, State Variables for Engineers

- 1998: Volume IX, Number 1

ARTICLES, NOTES, AND OTHER: Animaps (S. Arlinghaus, W. Drake, J. D. Nystuen, with A. Laug, K. Oswalt, D. Sammataro) | Spatial Analysis, the Wisconsin Idea and the UW-System. The Use and Abuse of Dispersion Statistics (F. Barmore) | Revitalizing Maps or Images? (S. Arlinghaus and R. De la Sierra) | Book Review: The Universe Below by William J. Broad (New York: Simon and Schuster, 1997, 432 pages) (J. D. Nystuen)

## - 1998: Volume IX, Number 2

ARTICLES, NOTES, AND OTHER: Animated Four Color Theorem: Sample Map (S. Arlinghaus) | Animaps, II (S. Arlinghaus) | Book Review: Rising Tide: The Great Mississippi Flood of 1927 and How it Changed America, by John M. Barry (D. Albert)

- 1997: Volume VIII, Number 1. See IMaGe Monograph 22 for scanned printout.

ARTICLES, NOTES, AND OTHER: Why Whales Don't Freeze or Kidney-Shaped Airports: Spatial Analysis and Spatial Design (J. D. Nystuen) | To the Memory of Clyde Tombaugh, 1906-1997 (F. Harary).

- 1997: Volume VIII, Number 2. See IMaGe Monograph 22 for scanned printout.

ARTICLES, NOTES, AND OTHER: The Photographic Record. SunSweep: A Visit on the Summer Solstice (J. D. Nystuen) | Buffers and Duality (S. Arlinghaus, F. Goodman, D. Jacobs) | A Graph Theoretic View of the Join-Count Statistic (S. Arlinghaus, W. C. Arlinghaus) | Differences in Feature Representation in Digital Map Bases (J. D. Nystuen, A. Frank)

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The links below are to text files transmitted over the e-mail. A separate file of figures was also transmitted. Readers wishing to see all of it, text and figures, should look at the appropriate entry in the IMaGe Monograph Series (1995 Solstice issue), Monograph 20.

- 1995: Volume VI, Number 1. See IMaGe Monograph 20 for scanned printout.

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- 1995: Volume VI, Number 2. See IMaGe Monograph 20 for scanned printout.

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The links below are to typeset TeX files which is how the journal was transmitted from 1990-1994. The person downloading the TeX file then made printout on his/her own equipment. The TeX code captures many images. To give the reader the idea, links have been added to hard copy images, printed from the TeX file, in Volume I. Beyond that, printout of all of the first five volumes appears on the links above, in suitably entitled books in the IMaGe Monograph Series. These books contain images captured by TeX code and printed out from the transmitted file, such as simple line drawings and crossword puzzles as well as photocopies of photographs which would not fit into the TeX code.

- 1994: Volume V, Number 1. See IMaGe Monograph 19 for scanned printout.

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- 1994: Volume V, Number 2. See IMaGe Monograph 19 for scanned printout.

ARTICLES, NOTES, AND OTHER: The Paris Metro: Is its Graph Planar? (S. Arlinghaus, W. C. Arlinghaus, F. Harary) | Interruption! (S. Arlinghaus) | Reprint: Imperfections in the Uniform Plane (M. Dacey)

- 1993: Volume IV, Number 1. See IMaGe Monograph 17 for scanned printout.

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- 1993: Volume IV, Number 2. See IMaGe Monograph 17 for scanned printout.

ARTICLES, NOTES, AND OTHER: Villages in Transition: Elevated Risk of Micronutrient Deficiency (W. Drake, S. Pak, I. Tarwotjo, Muhilal, J. Gorstein, R. Tilden)

- 1992: Volume III, Number 1. See IMaGe Monograph 16 for scanned printout.

ARTICLES, NOTES, AND OTHER: Computing Areas of Regions with Discretely Defined Boundaries (H. Stern) | The Quadratic World of Kinematic Waves (S. Arlinghaus, J. D. Nystuen, M. Woldenberg)

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- 1991: Volume II, Number 2. See IMaGe Monograph 15 for scanned printout.

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## Awards and Selected Comments

- Solstice was a Pirelli INTERNETional Award Semi-Finalist, 2001 (top 80 out of over 1000 entries worldwide) - One article in Solstice was a Pirelli INTERNETional Award Semi-Finalist, 2003 (Spatial Synthesis Sampler which appeared in Solstice, Volume XV, Number 1, 2004).
- American Mathematical Monthly, September 1992, in Telegraphic Reviews section notes Solstice as "one of the world's first electronic journals using TeX." L. A. Steen.
- Quotation from Science (American Association for the Advancement of Science), 29 November, 1991, p. 1291-Joe Palca. "BRIEFING Online Journals When the AAAS and OCLC Online Computer Library Center announced the scheduled debut next year of their new journal--The Online Journal of Current Clinical Trials-they said it would be the world's first peer-reviewed, online science journal (Science, 27 September, p. 1480). Since then, two other such journals have made their presence known to Science. They are Solstice: An Electronic Journal of Geography and Mathematics, published by Sandra Lach Arlinghaus of the Institute of Mathematical Geography in Ann Arbor, Michigan, and Flora Online, published by Richard H. Zander, curator of botany at the Buffalo Museum of Science. Both have been around for about 2 years and are available free over several popular research computer networks."
- Science News, January 25, 1992, p. 61. Ivars Peterson, in a report of the Annual Meetings of the American Mathematical Society. "Math for all seasons When the American Association for the Advancement of Science announced with considerable fanfare last year the 1992 debut of The Online Journal of Current Clinical Trials it was billed as the world's first peer reviewed science journal available to subscribers electronically. What the organizers of this effort didn't know was that several such electronic journals already existed. One of these concerns the application of mathematics to geography. Solstice: An Electronic Journal of Geography and Mathematics--published by Sandra Lach Arlinghaus of the Institute of Mathematical Geography a small, independent research organization in Ann Arbor, Mich.-- first appeared in 1990. Its two issues per year, published appropriately on the dates of the summer and winter solstices, go to about 50 individuals who receive the journal free. Transmission costs for distributing the journal electronically over a computer network to all subscribers amount to less than $\$ 5$ per issue with the cost of printing passed on the user. Libraries and other institutions that prefer printed copies pay for each issue, and those copies are generated from the computer files only when needed. 'It's all very cheap, all environmentally sound,' Arlinghaus says. But getting the journal going wasn't easy, she remarks. The biggest production problem involved photographs and figures which can't be transmitted electronically in the same, compact way as letters, numbers or even mathematical notation. At present, individuals wishing to see particular illustrations must obtain photocopies directly from the Institute of Mathematical Geography. Arlinghaus also admits that she has had trouble obtaining manuscripts for publication in this still-unconventional medium. But individuals who might initially have been skeptics 'become more receptive when they see the actual product,' she says."
- As of March 2008, 3D buildings appearing in the eBooks had been awarded over 50 blue ribbons by the Google 3D SketchUp Warehouse and therefore appeared as part of the default Google Earth loadset.


## Listings in Directories and Databases

- Solstice is listed in the Directory of Open Access Journals maintained by the University of Lund where it is maintained as a "searchable" journal.
- Solstice is listed on the journals section of the website of the American Mathematical Society,
http://www.ams.org/
- Solstice is listed in the EBSCO database.
- IMaGe is listed on the website of the Numerical Cartography Lab of The Ohio State University:
http://ncl.sbs.ohio-state.edu/4_homes.html
- Solstice is listed in Geoscience e-Journals


## Other Publications, Including Reprints (with Permission)

- Nystuen, John D., Editor. Michigan Interuniversity Community of Mathematical Geographers. Papers. Reprinted by IMaGe.

LIST OF AUTHORS AND TITLES OF PAPERS:

1. Arthur Getis, 1963. "Temporal land use pattern analysis with the use of nearest neighbor and quadrat methods"
2. Marc Anderson, 1963. "A working bibliography of mathematical geography."
3. William Bunge, 1964. "Patterns of location."
4. Michael F. Dacey, 1964. "Imperfections in the uniform plane." As it appears in the Solstice reprint, Vol. V, No. 2, 1994 printed in the IMaGe monograph series.
5. Robert S. Yuill, 1965. "A simulation study of barrier effects in spatial diffusion problems."
6. William Warntz, 1965. "A note on surfaces and paths and applications to geographical problems."
7. Stig Nordbeck, 1965. "The law of allometric growth."
8. Waldo R. Tobler, 1966. "Numerical map generalization;" and "Notes on the analysis of geographical distributions."
9. Peter R. Gould, 1966. "On mental maps."
10. John D. Nystuen, 1966. "Effects of boundary shape and the concept of local convexity;" Julian Perkal "On the length of empirical curves;" Julian Perkal "An attempt at objective generalization."
11. E. Casetti and R. K. Semple, 1968. "A method for the stepwise separation of spatial trends."
12. W. Bunge, R. Guyot, A. Karlin, R. Martin, W. Pattison, W. Tobler, S. Toulmin, and W. Warntz, 1968. "The philosophy of maps."

- Griffith, Daniel A. Spatial Regression Analysis on the PC: Spatial Statistics Using MINITAB. Workbook used at conferences.
- Philbrick, Allen K. This Human World. Undergraduate textbook. Reprinted by IMaGe.
- Kolars, John F. and Nystuen, John D. Human Geography: Spatial Design in World Society. Undergraduate textbook. Reprinted by IMaGe
- Arlinghaus, Sandra L. MapPack. Undergraduate workbook.
- Arlinghaus, Sandra L. and Riordan, Beverly. IMaGe Interactive Atlas. Pre-collegiate workbook.


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