



COVER PHOTO—Walled medieval (11th Century) village of Issy L'eneque in Burgundy, France. Taken in the summer of 1979 from a Cessna 172 modified for aerial photography. Camera used was a hand-held Honeywell Pentax SP1000 with a 1:2/55mm lens. Photo submitted by Scott L. H. Madry, Department of Anthropology, University of North Carolina, Chapel Hill.

Second-class postage paid at Falls Church, Virginia and at additional mailing offices.

*Photogrammetric Engineering and Remote Sensing* (ISSN 0099-1112) is published monthly by the American Society for Photogrammetry and Remote Sensing, 210 Little Falls Street, Falls Church, Virginia 22046. Publication Office—The Sheridan Press, Hanover, Pa. 17331. (Also see Notice on second following page.)

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# PHOTOGRAMMETRIC ENGINEERING & REMOTE SENSING



JOURNAL OF THE  
AMERICAN SOCIETY FOR PHOTOGRAMMETRY AND REMOTE SENSING

Volume LI

December 1985

Number 12

## Expectancy of Cloudless Photographic Days in the Contiguous United States

Inadvertent climate modifications since the 1930s have necessitated the replacement of the Sette Weather Chart with a new chart utilizing more recent observations.

*James E. Lee and Steven D. Johnson* .....1883

## Geometric Accuracy of Landsat-4 and Landsat-5 Thematic Mapper Images

The tested Landsat-5 image, uncorrected for skew and affine distortion, has a standard error of 11.2 m (0.4 pixel) with respect to ground control.

*W. T. Borgeson, R. M. Batson, and*

*H. H. Kieffer* .....1893

## Evaluation and Correction of Viewing Angle Effects on Satellite Measurements of Bidirectional Reflectance

Simple correction procedures significantly improved the directional contrast induced by major bidirectional reflectance effects due to wide or off-nadir viewing angles.

*Alain Royer, Pierre Vincent, and*

*Ferdinand Bonn* .....1899

## Asymptotic Reflectance Characteristics of Grass Vegetation

Estimates of the reflectance asymptotes were based on a regression model which showed the curvilinear nature of the spectral response to the grass canopy variables.

*William J. Ripple* .....1915

## Implementing LESA on a Geographic Information System—A Case Study

Recent advances in microcomputer hardware and software now make possible the development of an affordable county-level computer-based Land Evaluation and Site Assessment (LESA) system.

*T. H. Lee Williams* .....1923

## Small Area Population Estimates Using Aerial Photography

Aerial photo-derived housing unit counts were combined with certain demographic multipliers to make small area population estimates.

*John F. Watkins and Hazel A.*

*Morrow-Jones* .....1933

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Non-member subscription . . . \$65.00 per year (calendar)

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Printed in the United States of America.

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<b>A Digital Elevation Model of the Barnes Ice-Cap Derived from Landsat MSS Data</b>	
Slope and aspect information can be derived from the variations in surface reflectance.	
<i>G. D. Lodwick and S. H. Paine</i> .....	1937
<b>Software Simulation of On-Line Analytical Systems</b>	
An analysis demonstrates how to simulate the analytical plotter and interface functions by software, using a suitable interactive terminal.	
<i>V. Kratky</i> .....	1945
<b>A High Precision Photogrammetry Geodetic Positioning Cost Model</b>	
Based on the National Ocean Survey's Ada County, Idaho project, a generalized cost model is developed for prediction of precise photogrammetric point positioning costs.	
<i>James K. Crossfield</i> .....	1953
<b>Millimetric Coordinates (MMC): Communication and Teaching Aid</b>	
Simple steps and a millimetric ruler provide precise communication of locations when each user has an identical image.	
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