

MEMORANDUM

Date: July 15, 2013

To: CaGIS/ASPRS Fall Conference Proceedings Authors

From: Kimberly Tilley, ASPRS Director of Communications

Subject: Preparation of materials for Conference Proceedings

Please keep papers and posters to no more than 6 pages. Send your paper to:

CaGIS/ASPRS Fall Conference Proceedings c/o Kim Tilley kimt@asprs.org

*******VERY IMPORTANT******

All papers must be received no later than 5:00 pm on Monday, September 16, 2013.

If you have any questions regarding the Instructions to Authors or how to prepare your paper, please contact me or a member of my staff. Just to save time, I'll answer a few of the most common questions here:

"I cannot find the Instructions for Authors or the Assignment of Copyright forms. How can I get a copy?"

If you need additional copies of the instructions or forms, please check the ASPRS website at http://www.asprs.org/Conferences/San-Antonio-2013/Presenter-Volunteer/Paper-Presenters, or send an email with your request to <kimt@asprs.org>.

"How should I submit my paper ?"

Documents are to be sent by email attachment meeting the following specs: EMAIL should be sent to: kimt@asprs.org or papers may be posted to the ASPRS FTP site in the ASPRS_CaGIS Conference folder (ftp://birdseye.asprs.org). The login is ASPRS/FTP_USER (note capitalization) and the password is ASPRSgeneral (note capitalization). Please pay special attention to the part of the attached instructions headed **What to Submit**.

"What is the recommended font on a laser printer?"

A 10-point Times Roman on 11-point leading is the size we ask you to use.

"Can I get an extension on the deadline?"

The deadline is set so that we have time to prepare the proceedings and post them online prior to the meeting. If you cannot get your paper in by the September 16th deadline, you can send it in later and it will be posted after the conference.

"How do you want to receive my paper?"

We prefer that you send your paper either by attachment to an email to kimt@asprs.org, or by posting it to the ASPRS FTP site in the ASPRS_CaGIS_Conference folder (ftp://birdseye.asprs.org). The login is ASPRS/FTP_USER (note capitalization) and the password is ASPRSgeneral (note capitalization).

Please pay special attention to the attached instructions.

"Can I email or fax the copyright forms?"

Yes, you may either email the signed copyright forms to <u>kimt@asprs.org</u> or fax them to 301-493-0208. You could also post them to the ASPRS FTP site, but **make sure your last name is on the file name**.

"Did you get my paper?"

We prefer that you not ask us to call you about receiving your paper. All papers that have an email address will get a message indicating that your paper was received.

"What if I need to make corrections to my paper once you've received it?"

We cannot make corrections to papers. If you find that you MUST make critical corrections, please submit a new digital version of the paper CLEARLY STATING THAT IT IS TO REPLACE THE ONE ORIGINALLY RECEIVED. This should be done AS SOON AS POSSIBLE. There will be no extensions for papers needing corrections.

"Do I have to submit a paper to be able to give my oral presentation?"

People ask this question all the time. Please understand that it is NOT a requirement to submit a paper to the proceedings. You may still give your oral or poster presentation, even if you do not send a paper for the proceedings. However, we certainly hope you will submit your paper, as attendees are interested in reading them. If you don't have time to submit a full paper, we will take a summary version; however, it must be at least 5 pages in length and MUST conform to the format in the Author Instructions. **Simple abstracts are NOT published in the proceedings.**

"How do I register?"

Presenters who submit papers or posters for publication in the conference proceedings MUST REGISTER according to the Presenter Registration Policy listed in the Acceptance Letter you received from the Technical Program Co-chairs.

NOTE: The Presenter Registration Deadline is August 23, 2013. This date is the early registration deadline for attendees.

Please use the registration form at http://www.asprs.org/Conferences/images/PDF/San%20Antonio/Fall_2013_regForm_FINAL.pdf.

Presenters who are only attending the conference on the day they are presenting their paper/poster may register at the appropriate daily registration rate.

If you are not a student, but are presenting a poster, you may register at the proper rate. All presenters are expected to register for the conference at the appropriate rate (early registration, member or nonmember, etc.). When you register on line you should see a screen immediately after you hit the "Submit" button that tells you the registration went through and gives you a confirmation number. If you do not see that screen, then the registration did not go through. You will receive another confirmation from the ASPRS Meeting Registrar within a few days. To check on your registration status, call ASPRS Conference Registration at 301-493-0290, ext. 109. PLEASE NOTE: If you wait to register at the last minute, the on line registration will be clogged and you may not be able to submit the registration on time.

"I am a student, which registration rate do I have to pay?"

If you are a student and you are giving an oral presentation in a technical session or a poster presentation, you may register at the appropriate Student Registration Price as long as you provide a valid student ID with your registration.

"I am an exhibitor, how do I register?"

Companies that are exhibiting at the conference will receive an Exhibitor Kit with a registration form included. If you will be working at your company's exhibit during the conference, you can use one of those registrations, otherwise, you should complete the online registration form.

Again, if you have further questions, please contact us. See you in San Antonio.

CAGIS/ASPRS FALL CONFERENCE PROCEEDINGS INSTRUCTIONS FOR AUTHORS REGARDING PREPARATION OF MANUSCRIPTS FOR THE CONFERENCE PROCEEDINGS

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PURPOSE

The Proceedings of the CAGIS/ASPRS Fall Conference Proceedings will be published online from papers submitted by authors in the format described below. It is important to submit manuscripts according to the instructions so that we can prepare a uniform looking publication. **The document should be saved using the last name of the first author (example: Tilley.doc)**

We do not accept abstracts in place of a written paper for the conference proceedings. You must either submit a full paper, or a shortened version of not less than five pages, formatted according to these instructions. The Conference Proceedings are intended to be helpful to attendees and others who use the proceedings to read the individual submissions. The FOLLOWING INSTRUCTIONS WERE TYPED IN THE REQUIRED FORMAT. SEE SAMPLE AT THE END OF THESE INSTRUCTIONS.

Key words: (please insert up to 5 key words to help make your paper searchable)

WHAT TO SUBMIT

Email/FTP

Documents are to be sent by email attachment meeting the following specs:

EMAIL should be sent to: kimt@asprs.org or papers may be posted to the ASPRS FTP site in the CaGIS_ASPRS Conference folder (ftp://birdseye.asprs.org). The login is ASPRS/FTP_USER (note capitalization) and the password is ASPRSgeneral (note capitalization).

Attachments over 10 MB take a long time to download and should be placed on the ASPRS FTP site instead of sent through email.

Document Format

Documents may be submitted in any of the following formats:

- Microsoft Word
- Word for Macintosh (saved as compatible with Word for Windows.)
- Rich Text Format (RTF)
- Microsoft PowerPoint
- DO NOT SEND AN FTP DOCUMENT

Labeling the Final Document

Please save your final document as your last name.doc (example: Tilley.doc). Do not save it as ASPRS 2012 or the title of your paper. We get many papers saved with the same name. It is best to save it as your last name so we know it is your paper. If you have more than one paper, use Tilley_1.doc, Tilley_2.doc, etc.

Please use the following text as a footer for your paper.

CaGIS/ASPRS Fall Conference

October 29 – 30, 2013 * San Antonio, Texas

CaGIS/ASPRS Fall Conference October 29 – 30, 2013 * San Antonio, Texas

Images

Images should be scanned at 300 dpi in either color or grayscale as appropriate. Higher resolutions will be lost in the conversion process. Embed the images in your document. **DO NOT FLOAT THE IMAGES OVER THE TEXT**. (Use paste special in Word for Windows). If you send additional copies of your images separate from the document, use only one of the following formats:

TIF (Tagged Image File Format), BMP (Windows Bitmap), JPEG, GIF.

DO NOT SEND EPS format. This format has many different variations making it nearly impossible to translate them. Graphics/images should not exceed 1 MB per graphic/image, with a limit of ten (10) per paper.

To assure timely and efficient production of the Proceedings with a consistent and easy-to-read format, authors must submit their manuscripts in strict conformance with these guidelines. Correct "widows" and "orphans" in your paper (single lines of text that are left behind on the bottom of a page or that wrap to stand alone at the top of the next page). There will be no opportunity for corrections or improvements of poorly prepared originals. The failure to comply with the following guidelines could disqualify a paper from publication, including the page limitation, or a paper that is not received by the submission deadline.

MANUSCRIPT

Typing

Except for the headings and subheadings, all text should be single-spaced across the page. **DO NOT SUBMIT COPY IN TWO-COLUMN FORMAT.** Set the margins for an 8.5 x 11" sheet of paper. Set all margins at 1" on each side and at the top and bottom. These margins give a 6.5" x 9" area in which to type the copy. Copy should be clean, dark, and readable. The type font should be Times or Times Roman, 10 pt. for the body copy, 12 pt. for the main headings, 11 pt. for subheads. **DO NOT USE the Paragraph feature to separate your lines of text or paragraphs.** We end up having to remove all of that formatting and it takes hours.

Length

Please keep your manuscripts to no more than 12 pages, including abstract, figures, tables and references (as defined above).

TITLE AND ABSTRACT

Title

The title should appear in CAPITAL LETTERS without underlining, centered on the page, beginning at the top margin of the first page. More than one line may be used, but single-space between lines. Type the author name(s) and affiliation in upper and lower case letters centered under the title (as in the example above). In the case of multi-authorship, group names by firm or organization. Affiliation should include position(s) of the author(s), the institution(s), address(es) and email address(es).

Abstract

Start with a concise abstract (**limited to 250 words** that summarize the content of the paper. The abstract should be typed in one wide column across the whole page, as shown in the beginning of these Guidelines under "PURPOSE." Leave 2 blank line spaces between the author information and the abstract.

MAIN BODY OF TEXT

Type text single-spaced, with two line spaces between paragraphs and first order headings. Indent beginning of each new paragraph .25 inches from left margin. There are NO spaces between paragraphs within a section.

MAJOR HEADINGS

Headings

Major, or first order, headings are to be typed in 12 point boldface capital letters, centered over one column, as above this paragraph.

Subheadings

Type subheadings, or second order headings, in 11 point upper and lower case letters, boldface, and place flush left on a separate line.

Subsubheadings. Subsubheadings, or third order headings, should be indented 1/4 in., with text following on the same line, as in this sentence.

Footnote. Mark footnotes in the text with an asterisk (*); use a double asterisk (**) for a second footnote on the same page. Place footnotes at bottom of the page, separated from the text by a horizontal line.

Pagination. Do not put page numbers as footers on your paper.

References and/or Selected Bibliography

References should enable a librarian to supply the quoted paper or book to the reader. References should be cited in the text thus: (Smith, 1987b) and listed in alphabetical order in the reference section. Make sure that the titles of books and periodicals are italicized. Names of journals can be abbreviated according to the "International List of Periodical Title Word Abbreviations." When in doubt, write the names in full. We see the most inconsistencies with the References section of every paper. If we see obvious errors, we will make corrections, but this is not guaranteed. It is the responsibility of the author of the paper to make sure the references conform to the proper style. The following formats should be used:

*References from JOURNALS:

Smith, J., 1987a. Close range photogrammetry for analyzing distressed trees, *Photogrammetria*, 42(I):47-56.

*References from BOOKS:

Smith, J., 1989. Space Data from Earth Sciences, Elsevier, Amsterdam, pp. 321-332.

*References from NON-REFEREED LITERATURE:

- a) Smith, J., 1987b. Economic printing of color orthophotos, Report KRL-01234, Kennedy Research Laboratories, Arlington, VA-USA.
- b) Smith, J., 1988. Remote sensing to predict volcano outbursts, In: *Int. Arch. Photogramm. Remote Sensing*, Kyoto-Japan. Vol.x Part.J, pp. 456-469.

Illustrations

Placement. Although figures and tables are usually aligned horizontally on the page, large figures and tables may be turned on their sides. If a figure or table is turned sideways, be sure that the top is on the left-hand side of the page.

Captions. All captions should be typed in upper and lower case directly beneath the illustration. Use single spacing if a caption uses more than one line.

Line Drawings. Line drawings in computer format are acceptable. Make sure all text is large enough to be readable if the graphic needs to be reduced. Captions should be typed directly under each illustration. **NOTE: Color is acceptable in ALL illustrations and charts.**

Photographs. Please insert scanned images directly in the text. Type the caption in the text where the photo is to appear. Color photographs are acceptable.

Tables. Tables should be typed within the body of the paper. Each table should have a number and title.

Copyright. If your article contains any copyrighted illustration or imagery, include the appropriate copyright statement (such as SPOT Image 200- [fill in year] CNES). It is the author's responsibility to obtain any necessary copyright permission.

Equations, Symbols and Units

Equations. Type the equations. Leave two blank lines before and after equations.

Symbols and Units. Use SI (Systeme Internationale) Units and Symbols.

TRANSMITTAL AND INFORMATION Papers must be delivered to ASPRS by September 16, 2013.

Mail to: ASPRS/CaGIS Fall Conference Proceedings

c/o Kim Tilley kimt@asprs.org

REMINDERS:

- **DO NOT NUMBER** the pages.
- DO NOT DOUBLE-SPACE YOUR TEXT OR USE THE PARAGRAPH FEATURE.
- Save your final document as your last name.doc (i.e. Tilley.doc). If you have more than one paper, number them (i.e. Tilley_1.doc; Tilley_2.doc, etc.).
- Papers not received by the deadline will be posted after the conference. Submit papers early. If your paper must be reviewed and approved by your agency prior to submission, please start early so that you can meet the deadline.
- The speaker registration fee MUST BE PAID by August 23, 2013. If you are an exhibitor and will be using the registration that comes with your exhibit booth, or if one of the co-author's is presenting the paper, please send me an email informing me of that.
- If the speaker registration payment is not received by the deadline, your paper WILL NOT appear in the proceedings. If you are not speaking at the conference, your paper is ineligible to be in the proceedings. Take into account any and all regulations your agency has for paying registrations in advance.

IMPORTANT

- Do not wait until the last minute to submit your paper for the Proceedings.
- You will be notified when your paper is received if your email address is provided.

See sample paper layout below. This is a sample only and contains sections from several papers.

AN INTERNET ACCESSIBLE DATA AND INFORMATION SYSTEM FOR RESOURCE MANAGERS

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ABSTRACT

Earth Data Analysis Center at the University of New Mexico, under an Earth Science Information Partnering (ESIP) agreement with NASA, is designing an Internet-accessible application for land management applications. Land and resource managers will be able to manipulate spatial and spectral data using a variety of functions to extract information from multi-sensor, multi-temporal, and multi-resolution sources. The business case for the prototype focuses on agencies that manage hundreds or thousands of small, and highly fragmented, land holdings dispersed over regional geographic areas. The intent of the information system is to provide a coordinate-based tool for retrieving spectral, spatial, and socioeconomic data pertinent to each land unit, and to then process these data into information relevant to the manager's need. Spectral data currently included in the test area are Landsat TM, AVHRR, ATLAS, TRMM, Radarsat, and MASTER imagery. Future data sets, as they become available, will include ETM+, MODIS, ASTER, and ALI imagery. Among the several information extraction options for managers will be fly-throughs, temporal trends, economic context, environmental parameters, and eventually, economic modeling scenarios.

Key words: Internet, land management, multi-sensor, multi-temporal, Landsat.

INTRODUCTION

Satellite data have been available for over 30 years, but they have not been accessible easily to the public. Many of the satellite programs, such as Landsat, were designed as science missions that acquired data for scientific applications. Practical applications of these data were not the primary concern. Data obtained by most Earth observing missions have been processed using algorithms and data formats developed by scientists for their own research purposes. Furthermore, databases created to house information on these satellite data and their derived products, and access to these databases was designed by, and for, scientists. Therein lies the problem.

NASA received a Congressional mandate to make their data and products available to a broader user community – beyond the science community. However, data formats and access to these data are cumbersome and in some cases, impossible for non-science users. One of the broader community set of users are resource managers, such as land managers, water managers, and wildlife managers, to name a few. These users, for the most part, are not familiar with the scientific jargon utilized in data access systems such as NASA's EOSDIS, the Earth Observation System Data and Information System. Using the EOSDIS web site is not intuitive and is difficult to navigate if one is not familiar with the terminology. This paper focuses on the efforts of the Earth Data Analysis Center, at the University of New Mexico, to develop products from NASA sensor data, and to develop an Internet accessible, user-friendly delivery system that allows all users easy access to these data and products.

NASA EARTH SCIENCE INFORMATION PARTNERS

The Office of Earth Science (EOS) at NASA is funding an initiative known as the Earth Science Information Partners (ESIPs), which consists of twenty-four cooperative agreements between NASA and universities and private enterprise to advance the uses of NASA-sponsored science research and data beyond the scientific community. In short, their mission is to employ these data and their derived products in applications for broader user communities, such as local governments and industry. Of the twentyfour partner-ships, twelve are focusing on developing data and products for global applications and to provide subsetted products for local uses. These partners

Table 1. ESIP 2 and ESIP 3 Partners

ESIP 2s	ESIP 3s
University of Rhode Island	Bay Area Shared Information Consortium
University of New Hampshire	California Resource Agency
University of California – Los Angeles	University of New Mexico
University of California – Santa Barbara	University of Maryland
Jet Propulsion Laboratory (Genesis)	University of North Dakota
University of Maryland	Rice University
IBM – T.J. Watson Research Center	Planet Earth Science, Inc.
Jet Propulsion Laboratory (Ocean ESIP)	Reading Information Technology, Inc.
Global Hydrology and Climate Center	Scientific Fishery Systems
George Mason University	MRJ Technology Solutions, Inc.
Scripps Institute of Oceanography	University of Minnesota
Michigan State University	NBC Subsidiary (WRC-TV), Inc.

(known as ESIP 2s) are primarily universities that are engaged in research projects on a global scale. The other twelve partners constitute a mixture of industry and universities (ESIP 3s) that are focusing on processing NASA datasets into value-added, derived products on local and regional scales that can be ingested by non-science users such as museums, schools, fisheries, farmers, and resource managers (Table 1).

The Earth Data Analysis Center (EDAC) at the University of New Mexico was awarded an ESIP 3 cooperative agreement in 1998. It is a five-year initiative, to develop custom applications and products for resource managers in the Upper Rio Grande Basin (Figure 1). The Basin extends from Ft. Quitman, Texas (south of El Paso) to the headwaters of the Rio Grande in southern Colorado. Within the Basin, land management responsibilities are characterized by a highly fragmented geographic distribution. During the life of the project, EDAC will prototype products, information, and a customized delivery system to address land management, water management, and air quality assessment applications and needs. Development of the prototype delivery system and early derived products focuses on the needs of local land management agencies such as the New Mexico State Land Office, the New Mexico State Forestry Division, the Bureau of Land Management, and the U.S. Forest Service. These stakeholders are working closely with EDAC to identify Internet products that are responsive to their operational needs.

EDAC's PROTOTYPE PRODUCTS

EDAC's deliverables for the project are twofold. First, an Internet, user-friendly data access and delivery system is required to allow users quick and easy access to customized products and information. Second, these products and information must be presented in packages that are digested easily by practicing resource managers who most likely are not schooled in image processing technology. Ultimately, in accordance with the cooperative agreement, EDAC is required to develop its system and products in such a way that they are sustainable at the close of the five-year project. With these challenges and goals identified, EDAC's approach is to develop a prototype that will be beta tested by its stakeholders before release as a version 0 (V0) product.

Digital Orthophoto

The Washington Department of Natural Resources, Resource Mapping Section produced a digital orthophoto for the study area using a softcopy system (Socket Set). The source imagery was 1:12,000 color aerial photography. Orthorectification was accomplished using a canopy surface model developed using autocorrelation techniques. The final image used a 0.3m (1 foot) pixel.

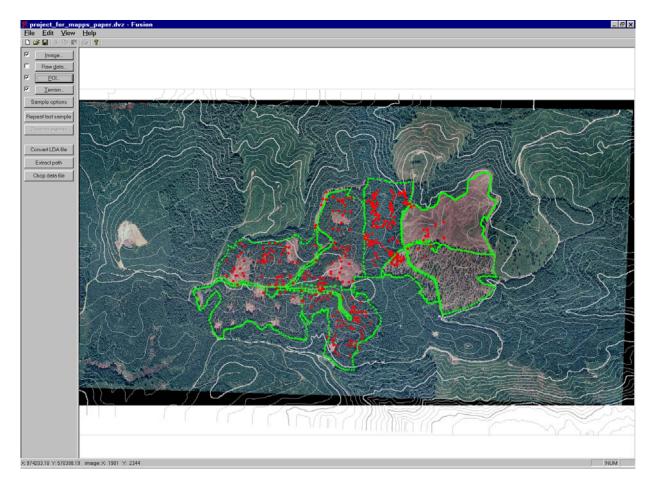


Figure 1. Screenshot of FUSION showing an orthophotograph of the Capitol Forest study site, 15-meter contours created from the digital terrain model, control points (red), and treatment area boundaries (green).

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