

Submitting Word Processor and Graphics Files: *a guide for RADIOCARBON authors*

1. Overview

The purpose of asking for electronic versions of your submission is threefold: to speed the process of typesetting, to allow the author additional control over the accuracy of transmission, and to allow *RADIOCARBON* additional control over additions or alterations that may be required up until the time of final printing. It is more important for us to get an accurate and consistent computer version from you than one that is formatted to look like a *RADIOCARBON* article, since in almost all cases your original format will be altered when we edit the file.

If your figures are produced using a graphics program, in most cases we can get superior reproduction by using the original files rather than scanning from hardcopy printouts, because the journal is now typeset directly from PDF files that we supply to our printing company.

Many of the observations below will be applicable to other scientific journal submissions as well.

2. Word Processor Files

2.1. General Considerations

For the most part, don't worry about spacing and type sizes for special features like headings, footnotes, figures captions, references, etc. It is often easier for us to convert files when the text is all in the same format, because when we apply our own paragraph tags to your text, format changes are made automatically.

However, **do** use the formatting features of your word processor to create the following special styles whenever possible:

- *italic* and **boldface** text
- superscripts and subscripts: ^{14}C , H_2SO_4 (don't use manually-raised reduced-point type here)
- curved, typeset-style quotation marks and apostrophes: “this” and it’s, not "this" and it's
- use an en-dash, not a hyphen, for inclusive numbers: 1989–1992, 37: 104–21 (your word processor manual should indicate if you have this character available). Use a Symbol-font hyphen for minus and negative numbers if it is available: $x - y$, -40°C . Use \pm , not +/-.

Avoid the following:

- tabs or indentation at the start of text paragraphs. Use block-style paragraphs.
- more than one hard return between paragraphs or before or after headings. We delete extras.
- tabs or hard returns to format References. Our Reference paragraph style will automatically format references correctly; tab characters and hard returns within a reference are deleted.
- any fonts other than basic Times Roman and standard PostScript fonts (Courier, Helvetica, Symbol, and Zapf Dingbats). See below for special and foreign-language characters.

2.2. Special Matters

Tables. Tables created in WordPerfect and Microsoft Word usually translate quite well; we can also import from Microsoft Excel. Don't use customized ruling or shading; our table template supplies the proper formats. We can also convert text that is formatted as a table with the use of

either tab characters or 2 or more space characters between columns. Please **don't** use a multiple-column layout instead of a dedicated table format; it will probably not translate correctly.

Put tables in a separate file or at the end of the regular text, not embedded in the running text.

Nowadays we prefer to typeset tables, and we use camera-ready copy only for very complicated table formats that cannot easily be reproduced by FrameMaker, our typesetting program.

Equations. We often have to re-set these by hand, so be sure they are clearly printed on the hard-copy version. We can usually convert equations created by WordPerfect, Microsoft Word, and MathType with reasonable success.

Foreign language and special characters. Most Western European and Greek special characters are not a problem, especially if you use a standard Windows or ANSI character set. If you use Eastern European characters, please highlight them on the manuscript so that we can be sure they are properly rendered when we convert the file.

2.3. Word Processor Formats

We can use files in the following formats, grouped by rows in order of preference; use one of the boldfaced programs if possible. We can read both IBM format and high-density Mac diskettes.

Word Processor File Formats

Program	Version(s)	Comments
FrameMaker	5.5 and later (any)	This is what we use to produce the journal. We can supply our format templates on request.
Microsoft Word	Word97 and later	Tables, paragraph styles, etc., translate well
WordPerfect	8.0	
Rich Text Format (RTF)	--	
LaTeX	--	We have a decent LaTeX to Frame translator

3. Graphics Files

3.1. General Considerations

There are two basic kinds of graphics formats used for displaying and printing: **vector** and **bitmap** (or **raster**). In addition, **Encapsulated Postscript** (EPS) is a printer-based page description language that mixes vector and bitmap features. Any graphics, charting, plotting, or drawing program that you use ought to be able to export files to one or more of the following formats, even if its native file format is not listed among them.

EPS and TIFF graphics are our two preferred formats.

- **Encapsulated Postscript** files are ideal for printing, since they use the printer's native language. They can be rescaled with minimal distortion. However, in a few cases we are unable to edit EPS files with our graphics programs, so if you submit an EPS file be sure that it is in final form.
- **Vector** graphics use equations to describe the lines, curves, and areas that make up an image. They are best suited to illustrations such as graphs, charts, and schematic diagrams. They can be

rescaled with minimal distortion. Most scientific graphic, CAD, and business charting programs can produce vector graphic files. Well-known examples include AutoCAD (.DXF), CorelDRAW (.CDR), and Hewlett-Packard Graphics Language (HPGL, also known as plotter files,.PLT). In addition, programs like Harvard Graphics and Lotus Freelance can export in .CGM format, which is ideal for us. The WordPerfect Graphics format (.WPG) can be vector, bitmap, or both. Suggestions for successful vector graphics:

- Use black-and-white when possible. DON'T use color—it may not print properly as grayscale. If you need grayscale effects, try not to use more than three or four readily distinguishable shades (*e.g.*, light gray, medium gray, dark gray, and black). Or use black-and-white hatching (crossed or diagonal lines).
 - Don't leave any more empty border than necessary around the figure.
- **Bitmap** graphics simply describe every point in a matrix (either by “on” and “off” for black-and-white formats, or by color for color and grayscale formats). They are best suited to free-hand-type drawings such as stratigraphic cutaways and detailed geographic or site location maps. They reproduce excellently if printed at their original scale, but information may be lost or distorted in rescaling, especially if they are highly detailed. Suggestions:
 - Avoid very tiny text and line sizes. In general, lines and text will not print well if they are less than two pixels wide.
 - Aim for the size your figure will actually be printed in. Maximum size is 5.5 × 7.5 inches (*ca.* 14 × 19 cm), in either portrait or landscape orientation.
 - For detailed bitmap graphics, whether original or scanned, a resolution of 600 dpi (dots per inch) is recommended. For less detailed graphics like charts and bar graphs, 300 dpi is usually sufficient.

3.2. Formats

Besides EPS graphics files, we can use files of the following formats, grouped in rows according to order of preference. Again, where you have a choice, we prefer IBM PC formats and disks. Please put each graphical image in a separate computer file rather than into the file that contains the text of your article.

Bitmap Graphics

Program or format	Version(s)	Comments
Tag Image File Format (.TIFF)	any	This is the bitmap format that works best for us
Bitmap (BMP) GIF JPEG (.JPG) PhotoCD (.PCD) Targa (.TGA)	Windows any	All of these formats we can easily edit
Windows Metafile (WMF) Enhanced Metafile (EMF) X11 bitmap (.XBM)		All of these formats can be translated, but results may not be as good as with the above

4. Spreadsheet and Database Files

If you have tabular data stored in a spreadsheet or database file, we can probably convert it and print a table from it. We can print graphs produced by programs with an (*) in the following list:

Vector Graphics

Program or format	Version(s)	Comments
Adobe Illustrator	through 10.0	We can easily edit and import .AI graphics
CorelDRAW (.CDR)	3–7	We can edit and import .CDR files
Computer Graphics Metafile (CGM)	1–4	Excellent grayscale; many programs can export this

Spreadsheet formats. We can use: Excel* (Excel97 and later). We are able to work with other formats, but results vary.

Database formats. Although rare, we prefer MS Access 2000 or later. If submitting a database file, please contact the managing editor first (editor@radiocarbon.org)

5. PDF Files

We can import single pages from PDF files but cannot edit them—they must be “camera ready.”

If none of these formats is available, send your files anyway—we may still be able to read them!