USING THE AMS EXTENDED ABSTRACT LaTeXCLASS AND TEMPLATE

Chris Slocum[a] *†

[a] *Fort Collins, Colorado*

1. INTRODUCTION

The purpose of the `ametsocextabs` LaTeXclass template is to assist presenters at American Meteorological Society (AMS) conferences prepare an extended abstract that follows the AMS Extended Abstract Instructions (AMS 2025a). While AMS no longer provides hard copies of the extended abstracts, the abstracts allow presenters to capture their presentation in greater detail.

Also, The Max A. Eaton Student Prize, awarded for an outstanding student paper presented at each conference on hurricanes and tropical meteorology, requires students to submit an extended abstract and evaluates the quality of both extended abstract and presentation (AMS 2025d,e).

2. THE `ametsocextabs` LaTeXCLASS

2.1. Font Size

The AMS Extended Abstract Instructions permits font sizes of 9–10 pt in a sans-serif typeface such as Helvetica (AMS 2025a). To select a size, include one of the following options in the documentclass call:

i. `9pt` for a 9 pt font size (the default), and

ii. `10pt` for a 10 pt font size.

As an example, using the 9 pt option would look like `\documentclass[9pt]{ametsocextabs}`.

2.2. Mathematical Formula Typeface

Mathematical Formulas should follow the AMS author guidelines (AMS 2025c). One difference between AMS journal articles and extended abstracts is the typeface in which the mathematical formulates are presented.

Here, by default, mathematical formulas render with a sans-serif typeface to stay consistent with the AMS guidelines shown by this example for the cosine function:

$$y = \cos(x), \tag{1}$$

where x is the independent variable and y is the dependent. Equations can be referenced in the usual way as with (1).

However, users can add the `serif` class option to the documentclass call to change the mathematical formulas from a sans-serif typeface to a serifed typeface (e.g., `\documentclass[serif]{ametsocextabs}`). This option might be useful when symbols are not clear (e.g., a lowercase 'l' renders as *l* and an uppercase 'i' as *I*).

2.3. Citations and References

The `ametsocextabs` LaTeXclass template includes the AMS BibTeX style file `ametsocV6`. With which, presenters can follow the citation instructions included in the documentation for the AMS LaTeXfiles AMS (2025b,f).

The AMS BibTeX style uses two basic citation macro commands:

- `\citet` for textual citations →Eliassen (1951), and
- `\citep` for parenthetical citations →(Eliassen 1951).

You can add text to a parenthetical citation and multiple citations just as in the AMS LaTeXfiles (e.g., Eliassen 1951; AMS 2025b,f).

Store references in a `.bib` bibliography file such as the provides `references.bib` file. Entries should follow AMS's style with the appropriately populated fields (e.g., AMS does not use issue but BibTeX will still render it). See the "How to Use the American Meteorological Society Bibliographic Style File" PDF file included in the AMS LaTeXfiles AMS (2025b,f).

Data availability statement. The LaTeX class file used to generate this PDF issue available under a BSD 3-clause licence at `https://github.com/CSlocumWX/ams_extended_abstract`.

Acknowledgments. The author would like to acknowledge Prof. Wayne H. Schubert and Rick Taft for comments on initial versions of the AMS extended abstract LaTeXclass. The author developed the class while a graduate student in the

**Previous affiliation*: Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado.

†*Corresponding author address*: Chris Slocum, `https://github.com/CSlocumWX/`

Schubert Research Group, Department of Atmospheric Science, Colorado State University. During the development of this class, the author received funding through National Oceanographic Partnership Program through ONR contract N000014-10-1-0145, National Oceanic and Atmospheric Administration (NOAA) Grants NA090AR4320074, NA14OAR4320125 at the Cooperative Institute for Research in the Atmosphere at Colorado State University and through the National Science Foundation under Grants ATM-0425247, ATM-0837932, AGS-1147120, AGS-1250966, AGS-1546610, and AGS-1601623.

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