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1. INTRODUCTION

The purpose of the `ametsocextabs` L^AT_EX class 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` L^AT_EX CLASS

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 formulas 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:

$$y = \cos(x), \quad (1)$$

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 serified typeface (e.g., `\documentclass[serif]{ametsocextabs}`). This option might be useful when symbols are not clear (e.g., a lowercase ‘l’ renders as / and an uppercase ‘I’ as I).

2.3. Citations and References

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

The AMS BibTeX style uses two basic citation macro commands:

- `\citete` 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 L^AT_EX files (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 L^AT_EX files AMS (2025b,f).

Data availability statement. Add Data availability statement here. Use the `\url{}` macro command to link to data.

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REFERENCES

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