

May 15, 18 14:05

TechnicalCorrectionRequest.txt

Page 1/3

Topic Editor Decision: Publish subject to technical corrections (14 May 2018) by David Stevens

Comments to the Author:

The authors have done a good job of addressing the concerns of reviewers. Thus I am happy to recommend publication of the manuscript. I have some minor technical corrections which will hopefully aid clarity.

Abstract

Line 11: remove "the" leaving "with increasing latitude (both in Argo & SSH and HYCOM), mainly due to mesoscale and interannual variability."

Done

Line 12: insert commas "Argo & SSH, as well as HYCOM, reveal interannual variability"

Done

Lines 13/4: remove the sentence "It mostly does not quite reach the level of significance because the duration of the multi-year phases with high (low) transports varies quite a bit." as it is not particularly clear and does not enhance the abstract.

Done

Line 17: remove "(EOF)" as the acronym is not used in the abstract and it is defined when first used in the main text.

Done

Page 5, lines 6/7: replace last sentence with "Most of the estimates from earlier studies are based on quasi-synoptic sections, while some are based on time series from moorings with current meters or Inverted Echo Sounders (IES)."

Done

Page 5, line 18. capital N for "North Atlantic"

Done

Page 6, line 4: replace "dynamic" with "dynamics" and "is" by "are"

Done

Page 12, line 14: insert the word "magnitude" between "with" and "20"

Done

Page 16, line 15: replace "in in" with "in"

Done

Page 20, line 8: SAM isn't an ocean index. The Marshall time series that is used in the manuscript is based on land station observations of atmosphere pressure.

We double-checked. Many publications and websites call it an index.
Examples are:

https://instaar.colorado.edu/uploads/publications/lovenduski_grl_2005.pdf
<https://journals.ametsoc.org/doi/full/10.1175/2008JCLI2260.1>
<https://stateoftheocean.osmc.noaa.gov/atm/sam.php>

Page 20, line 10: replace "indexes" with "indices"

Done (throughout the manuscript)

May 15, 18 14:05

TechnicalCorrectionRequest.txt

Page 2/3

Page 20, line 21: replace `âM-^@M-^\\maximumâM-^@M-^]` with `âM-^@M-^\\maximaâM-^@M-^]`

Done

Page 21, line 3: replace `âM-^@M-^\\indexesâM-^@M-^]` with `âM-^@M-^\\indicesâM-^@M-^]`

Done

Page 26, line 21: replace `âM-^@M-^\\In consistencyâM-^@M-^]` with `âM-^@M-^\\ConsistentâM-^@M-^]`

Done

Page 33: There is a comma missing after the Evans and Signorini (1985) reference.

Done

Page 34: change end of b) to `âM-^@M-^\\âM-^@|` collected between January 9, 1992 and May 2, 2016. Though why so precise here when a) just states the years.

2000-2015 stands for January 1, 2000 to December 31, 2015.

We gave the exact dates for the latter, because the time period deviate from full calendar years.

We changed it to: "collected during January 1992 to April 2016"

Page 36, caption: Either use grey or gray consistently, better grey. The same holds throughout the manuscript.

Done

Page 39, caption: There is a stray 2 in the word `âM-^@M-^\\transportâM-^@M-^]`

Done

Page 49, line 3: remove `âM-^@M-^\\less thanâM-^@M-^]`

Done

Page 49, line 10: extraneous open bracket before the references

Done

Page 49, line 16: replace `âM-^@M-^\\BecauseâM-^@M-^]` with `âM-^@M-^\\AsâM-^@M-^]`

Done

Page 49, line 16: replace `âM-^@M-^\\Because ofâM-^@M-^]` with `âM-^@M-^\\Due toâM-^@M-^]`

I assume this refers to line 19. Done

Page 50, in a few locations. Should you use the phrase `âM-^@M-^\\identical transportsâM-^@M-^]` presumably the numerical values arising from the XBT transports or model are not precisely identical, but simply very close.

The transport are identical if none of the transport of the Brazil Current occurs in the shallow regions.

We rephrased the sentences in the second paragraph to clarify the text (by defining what we are comparing).

A general point on the shaded colour figures. Could you avoid using the old default Matlab (IâM-^@M-^Ym assuming) jet/rainbow colour map. This has a number of issues associated with inaccessibility and perception skewing. Even Matlab have acknowledged this now by making parula the default colormap. See

<https://blogs.mathworks.com/steve/2014/10/20/a-new-colormap-for-matlab-part-2-troubles-with-rainbows/>

<https://blogs.egu.eu/divisions/gd/2017/08/23/the-rainbow-colour-map/>

<https://www.climate-lab-book.ac.uk/2014/end-of-the-rainbow/>

May 15, 18 14:05

TechnicalCorrectionRequest.txt

Page 3/3

We tried different colormaps (including red-blue and parula).
The colormap jet works better for representing maxima and minima,
which are the focus of this paper.