CORRIGENDUM

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The authors of Ronalds et al. (2018) have discovered an error (or "bug") in one of the computer codes used in the wavebreaking analysis, which had shifted the results toward waves with shorter wavelengths, that is, larger zonal wavenumbers k. As a result, the representative wavenumbers used in Figs. 3, 6, 9, 10b, 11, and 12b in that paper were too large. Those figures have been reproduced with the correct wavenumbers, and Figs. 3, 6, 9, and 11, for which the error resulted in changed content, are shown below, with corrected content and captions. The content of Figs. 10b and 12b (along with Fig. 8; see below) did not change, and they are not reproduced here. The only changes in the text are with regard to figure descriptions, specifically the zonal wavenumber chosen and the phase speed chosen for the visual representation of the wave propagation width (the thin, vertical black lines in Figs. 3, 6, and 9). *There are no changes to either the discussion or conclusions of this paper.* The following paragraphs describe the specific changes to figures, captions, and text.

Figure 3 should now be zonal wavenumber $k = 3$. The thin vertical black line is now showing the wave propagation width for the LOWICE run at a phase speed of $c = 18 \, \mathrm{m \, s^{-1}}$. The caption changes accordingly. Changes to text are on page 7075, paragraph 1: "wavenumber $k = 3$ waves" and "wave propagation width for waves of $k = 3$ and $c = 18 \, \mathrm{m \, s^{-1}}$ for the LOWICE run."

Figure 6 is now zonal wavenumbers $k = 4$ (Fig. 6a) and 6 (Fig. 6b). The vertical black lines indicate wave propagation width for the AAMP run at phase speeds $c = 15$ (Fig. 6a) and 18 (Fig. 6b) m s^{-1}. The caption changes accordingly. Changes to text are on page 7077, paragraph 1: "wavenumbers $k = 4$ (Fig. 6a) and 6 (Fig. 6b)" and "wave propagation width of a wave of $k = 4$ and $c = 15 \, \mathrm{m \, s^{-1}}$ (Fig. 6a) and $k = 6$ and $c = 18 \, \mathrm{m \, s^{-1}}$ (Fig. 6b)." In the next paragraph, sentence 2 should read "This is also true for wavenumber $k = 6$, except for phase speeds of less than about $3 \, \mathrm{m \, s^{-1}}$ for AAMP or $5 \, \mathrm{m \, s^{-1}}$ for CTRL."

In the original Fig. 8 we included a list of wave propagation widths for wavenumber $k = 6$ and phase speed $c = 4 \, \mathrm{m \, s^{-1}}$. These values are now calculated at $k = 4$, and they are unchanged. The caption should read "wavenumber $k = 4$" and changes to text are on page 7079, paragraph 2: "wave propagation widths for wavenumber $k = 4$."

Figure 9 is now zonal wavenumber $k = 4$ (Fig. 9a) and 8 (Fig. 9b). The vertical dashed black lines now represent wave propagation width for TRQ10 but still at phase speed $c = 4 \, \mathrm{m \, s^{-1}}$. The caption changes accordingly. Changes in text are on page 7078, left column: "we chose wavenumbers $k = 4$ and $k = 8$," "wavenumbers $k = 4$ and $k = 8$ are shown in Figs. 9a and 9b, respectively" and "wave propagation width for the TRQ10 run." More changes occur in the next paragraph: "the reflective latitude is not seen by waves,

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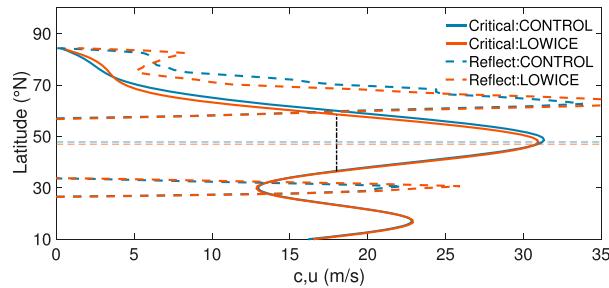
FIG. 3. The North Atlantic critical-level and reflective-level profiles at 300 hPa (solid and dashed curves, respectively) for wavenumber $k = 3$. The CCSM4 control simulation (CONTROL) is shown in blue, and the sea ice–loss experiment (LOWICE) is in red. The mean 850-hPa jet position is indicated by the thin horizontal dashed line. The thin, black vertical line represents the wave propagation width for a wave with phase speed $c = 18 \, \mathrm{m \, s^{-1}}$ in the LOWICE run.
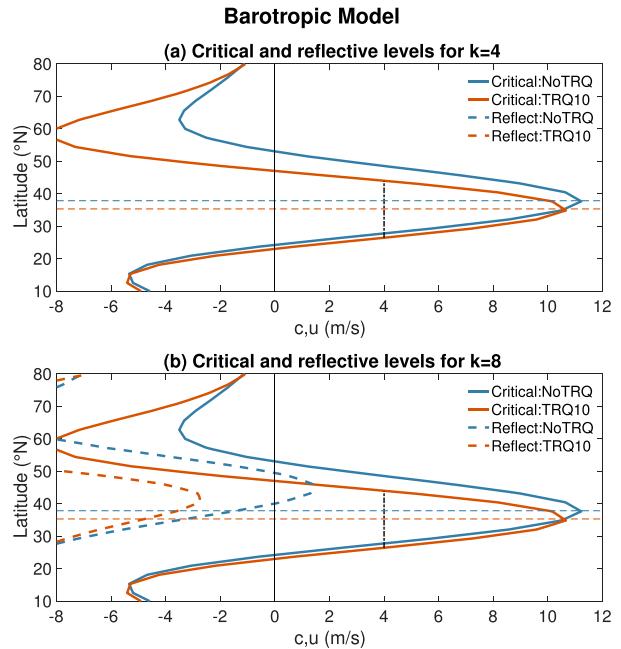
Barotropic Model

FIG. 9. Critical-level and reflective-level profiles (solid and dashed curves, respectively) for wavenumber $k = $ (a) 4 and (b) 8. The control simulation (NoTRQ) is in blue, and the easterly torque experiment (TRQ10) is in red. The thin, vertical black lines indicate the wave propagation width for the TRQ10 experiment at phase speed $c = 4 \, \mathrm{m \, s^{-1}}$. The mean jet position is indicated by the solid vertical lines. The stirring is located at 35°N, and the torque is at 55°N with an amplitude of $-1.0 \, \mathrm{m \, s^{-1} \, day^{-1}}$.
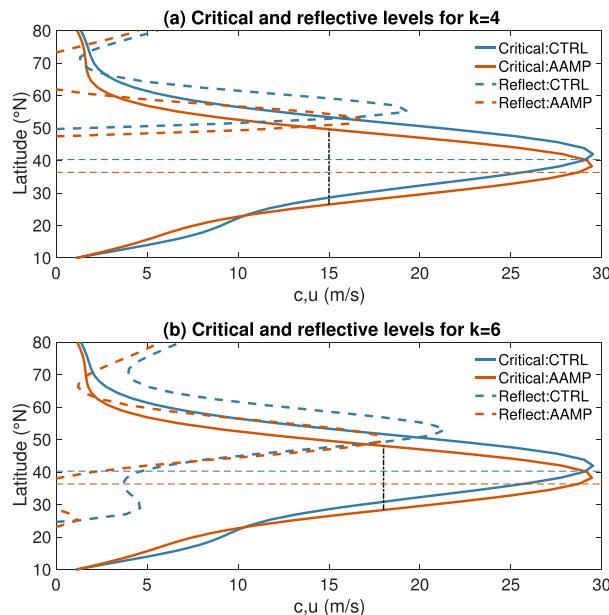
Dry Dynamical Core Model

FIG. 6. Critical-level and reflective-level profiles at 300 hPa (thick solid and dashed curves, respectively) for wavenumbers $k = $ (a) 4 and (b) 6. The control simulation (CTRL) is in blue, and the polar-heating experiment (AAMP) is in red. The 775-hPa mean jet position is indicated by the thin dashed lines. The thin, vertical black line represents the wave propagation width in the AAMP run for phase speeds $c = $ (a) 15 and (b) 18 $\mathrm{m \, s^{-1}}$.
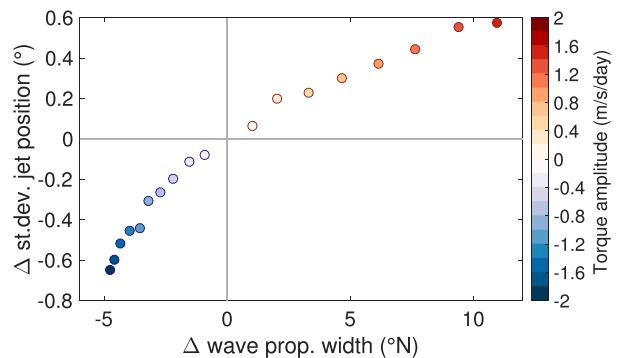

FIG. 11. The relationship between changes in the wavenumber $k = 4$ wave propagation width for phase speed $c = 4 \, \mathrm{m \, s^{-1}}$ and the standard deviation of jet position. The blue dots represent the same set of experiments as in Fig. 10, with increasing easterly torque amplitude as the colors get darker. The red dots represent a similar set of experiments for increasing westerly torque amplitude. For all experiments, the stirring is held fixed at 35°N and the torque is at 55°N.

and so the wave propagation'' (delete ''with a positive phase speed'') and ''This is also true for most phase speeds in Fig. 9b, with a zonal wavenumber of $k = 8$.''

Figures 10b, 11, and 12b show values for wave propagation widths, now calculated at $k = 4$. The captions are all changed accordingly (to ''$k = 4$''). Text changes are made on pages 7079 (paragraph 3), 7080 (paragraph 1), and 7081 (paragraph 1), for which all instances of $k = 6$ are changed to $k = 4$. The content of Figs. 10b and 12b is unchanged.

Figure 11 was also found to have typographical error in the color-bar ticks, which should range from -2 to 2 rather than from -1 to 1. The x axis was also changed slightly. Values within the figure are unchanged, with zonal wavenumber changed to $k = 4$.

REFERENCE

Ronalds, B., E. Barnes, and P. Hassanzadeh, 2018: A barotropic mechanism for the response of jet stream variability to Arctic amplification and sea ice loss. *J. Climate*, **31**, 7069–7085, https://doi.org/10.1175/JCLI-D-17-0778.1.