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# Corrigendum to "Energetics of the Martian Atmosphere Using the Mars Analysis Correction Data Assimilation (MACDA) Dataset" [Icarus 276 (2016) 1–20]

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A coding error resulted in the barotropic energy conversion (BTEC) term taking the wrong sign throughout the paper. All figures showing BTEC, whether as an average or an instantaneous field, should have the sign swapped. This change alters the following conclusions: BTEC acts as a source of eddy kinetic energy on the upstream side of the storm tracks, namely in Acidalia Planitia and Utopia Planitia, and as a sink just upstream of the highest topography. BTEC is a weak source of eddy kinetic energy closer to the surface, but is a strong source above 10 Pa. The main conclusion that waves decay by BTEC and that waves in high opacity situations grow via BTEC remains, but there is also a positive contribution toward the EKE by the BTEC during the growth periods of waves, even in low-opacity situations. These changes make the resulting BTEC more inline to that of other modeling efforts (Barnes et al., 1993; Greybush et al., 2013; Tabataba-vakili et al., 2015), observations (e.g., Banfield et al., 2004), and terrestrial studies (Chang, 2001; Chang et al., 2002; Decker and Martin, 2005; Ahmadi-Givi et al., 2014; Herrera et al., 2016). The new BTEC also slightly modifies the residue shown in Fig. 6, but the qualitative conclusions for the residue remain unchanged.

Finally, a proofing error resulted in the duplication of one figure. The corrected Fig. 17 is shown with the original BTEC.

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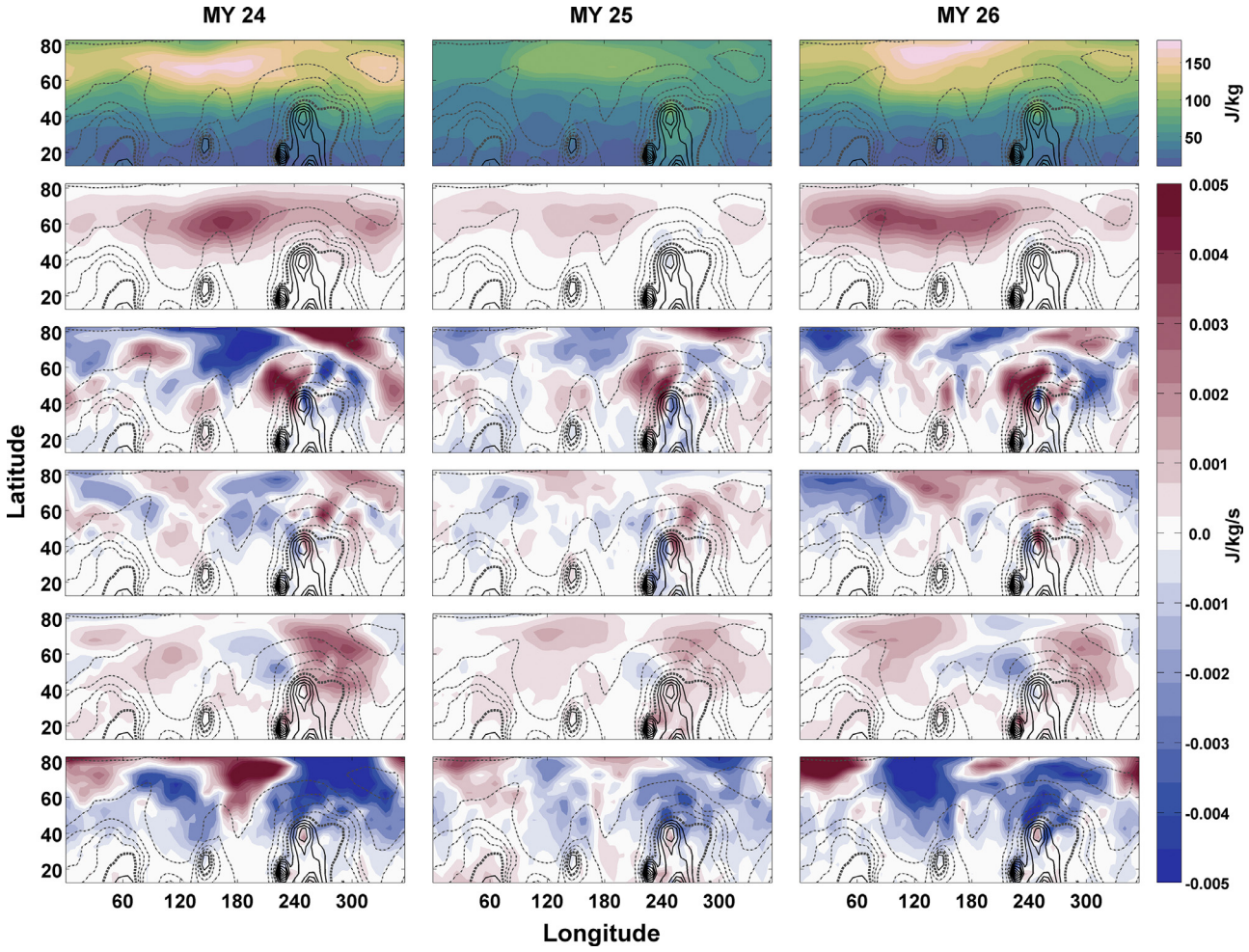


**Fig. 6.** Pressure-weighted vertical averages of the time mean of the terms of the eddy kinetic energy equation for $L_s = 200^\circ - 230^\circ$ for MY 24 (left column), MY 25 (center column), and MY 26 (right column). Shown is the eddy kinetic energy (top), baroclinic energy conversion (second row), geopotential flux convergence (third row), the eddy kinetic energy transport (fourth row), the corrected barotropic energy conversion (fifth row), and the corrected residue (bottom). Contours are surface elevation in 1000 m increments. Values below the mean geoid are dashed with the 0 mean geoid bolded.

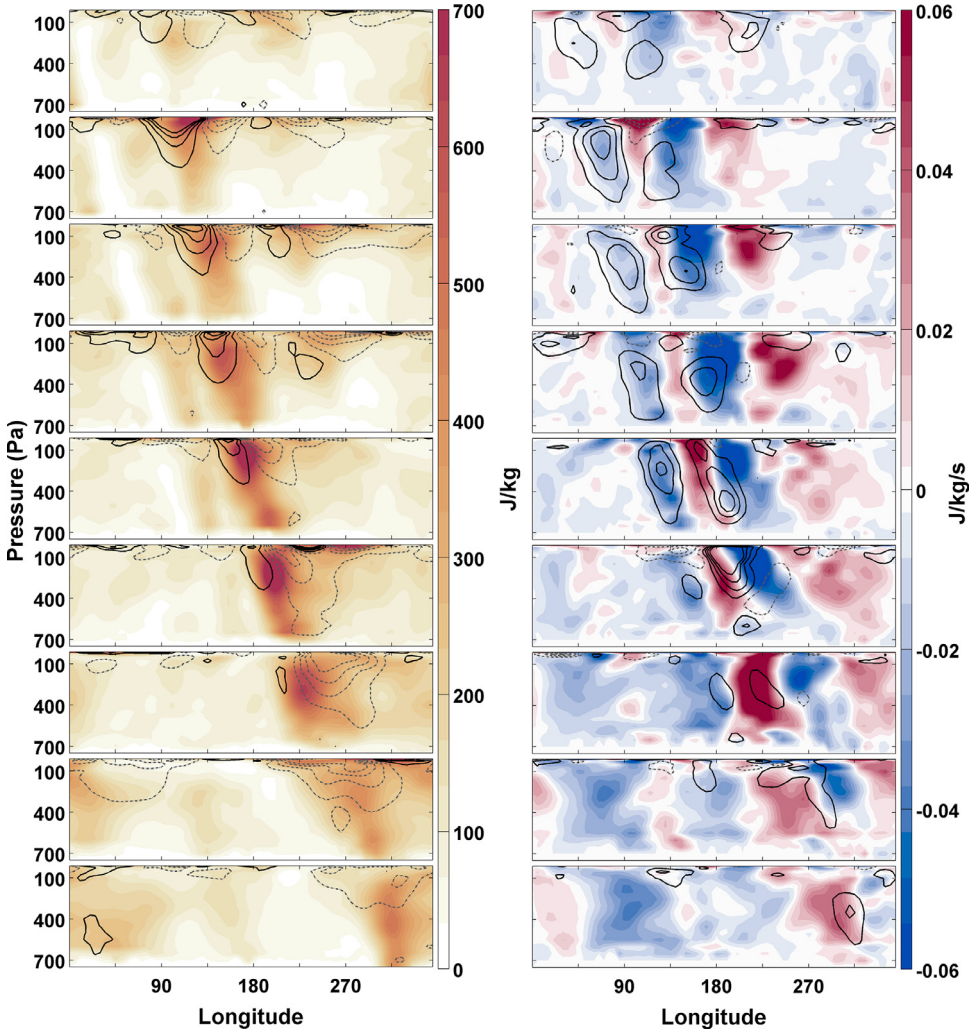


**Fig. 17.** Time series of the meridional average of eddy kinetic energy (left) with barotropic energy conversion contoured in 0.006 J/kg/s increments and negative values dashed and geopotential flux convergence (right) with baroclinic energy conversion contoured in 0.006 J/kg/s increments and negative values dashed in the 57.5° – 82.5° N latitude band for the wave in Fig. 16.

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