

Dear Dr. Makarieva:

Thank you for submitting your manuscript to Geophysical Research Letters.

I have now received 2 reviews of your manuscript, one from one of the original reviewers and a second from a new reviewer. Based on the reviews and my own reading of the manuscript, I am declining your manuscript for publication in Geophysical Research Letters.

I am enclosing the reviews, which you may find helpful if you decide to revise your manuscript and submit to another journal. I am sorry that I cannot be more encouraging at this time.

Thank you for your interest in GRL.

Sincerely,

xxx  
Editor  
Geophysical Research Letters

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Reviewer #1 Evaluations:  
Science Category: Science Category 1  
Presentation Category: Presentation Category A

Reviewer #1 (Comments to Author):

I recommend the publication in the present form. The authors have discovered a novel mechanism of atmospheric air motion on the Earth, which is physically consistent. As a consequence of the continuity equation, the horizontal gradient of total air pressure is related to the vertical non-equilibrium pressure gradient of the condensable gas (water vapor). In the case of the Hadley cells, the estimates for condensation-induced horizontal pressure gradient are confirmed by the experimental observations.

Reviewer #3 Evaluations:  
Science Category: Science Category 4  
Presentation Category: Presentation Category A

Reviewer #3 (Comments to Author):

See attached review.