Is the atmosphere a giant steam engine?

M. Simon, Technical Contributor

As a former Naval Nuke, I was intrigued by a recent paper on climate. It looks at atmospheric circulation in terms of water vapor condensation. A steam engine if you will. The paper claims that winds are driven by the condensation of water vapor, and the resultant variations in local atmospheric pressure that the condensation causes. Now the authors don't make the steam engine analogy. I do. The paper is extensively discussed with replies from the authors at Climate Etc. [1]I was struck by this comment early on in the long (over 1,000) list of comments. The commenter calls himself "tallbloke".

> I love it. Scientists who understand thermodynamics.

If this way of looking at the atmosphere is correct, then CO2 plays a much less significant role in atmospheric dynamics than I had thought. And my thinking has been for some time that the answer to the role of CO2 in atmospheric dynamics and global warming was "not much". This has been borne out to some extent by the last sixteen years of flat global temperatures while CO2 has been steadily rising.

A hat tip to The Air Vent [2] for alerting me to the existence of the paper and the site where it was being discussed.

M. Simon's e-mail can be found on the sidebar at Space-Time Productions [3].

Engineering is the art of making what you want from what you can get at a profit.

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http://www.ecnmag.com/blogs/2013/02/atmosphere-giant-steam-engine?qt-recent_content=0&qt-most_popular=0

Links:
[1] http://judithcurry.com/2013/01/31/condensation-driven-winds-an-update-new-

version/
[2] http://noconsensus.wordpress.com/2013/02/01/condensation-driven-winds/
[3] http://spacetimepro.blogspot.com/