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Ockham's Razorblade Shaving Wind-Induced Circulation

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Terrestrial physical oceanography is fortunate because of the existence of the continents that divide the low-latitude oceans into basins. At first glance, the previous statement appears to be not obvious because an ocean-planet should be much simpler to describe.
Simple-case explanation is the central aspect of Ockham's Razorblade: If a theory fails to describe the most-simple case properly, the theory is, at least, 'not good'.
Also Descartes' methodical rules take the most-simple case as starting point. The analysis of wind-induced circulation on an ocean-planet will support the initial statement.

Earth's south hemisphere is dominated by the oceans. The continents' influence on the zonal-average zonal-wind climate is relatively small. Therefore, South Hemisphere's zonal wind pattern is a relatively good proxy for that of an ocean planet.
Application of this wind-stress pattern to an ocean planet yields reasonable meridional mass-flow results from the polar-regions down to the high-pressure belts: Down-welling and up-welling of water-mass are approximately balanced.
However, the entire tropical circulation can in principle not be closed because there is only down-welling – even if the extreme down-welling in the equatorial belt ($\pm$ 8°, with a singularity at the equator) is disregarded.

The only input to the calculations is the observed terrestrial south-hemisphere zonal wind-stress pattern. Meridional stress is irrelevant because it produces a closed zonal Ekman-transport around the ocean planet (sic!).
Vertical mass-transport is calculated from the divergence of the wind-induced meridional Ekman-mass-transport, which in its turn is a necessary consequence of angular-momentum conservation. No assumptions are made on how the return-flows at depth are forced because the wind-force equations cannot contribute hereto. This circumstance expresses a fundamental difference to atmospheric circulation, where mechanical forcing is caused by the pressure-fields that result from differential heating/cooling and therefore 'automatically' comprise the entire circulation system. Wind-caused oceanic flow is exclusively generated by frictional wind-forces at the surface, and other processes in the ocean are not causally connected hereto.

In absence of continents it is quite difficult to 'find' the corresponding forcing for the meridional return-flows – and it can definitely not be wind-force-caused – very strange!
The fact that the wind-induced circulation can only be closed by the action of other processes, which are not causally connected to wind-forces, demonstrates that something must be fundamentally wrong.
The singularity at the equator and the extreme down-welling in the equatorial belt indicate an additional severe problem that can only be avoided if zonal wind-stress is completely excluded.

Escape to additional assumptions is similar to the introduction of the epicycles in order to explain the planets' retrograde motion in maintaining geocentric cosmology.
Should the previous analysis be ignored in favour of maintaining the 'established' ideas of wind-induced circulation or should there be an effort to formulate new ideas that provide closed and balanced circulation without employing other processes than wind-forces?