An Important Scientific Controversy: Oceanic CO₂ Fluxes

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The following three papers [Broecker et al., this issue; Smith and Jones, this issue; Wesely, this issue] are a detailed discussion between the oceanographic geochemical community and the physical oceanographic air-sea interaction community. It is my opinion that these papers provide for the community an in-depth review of the methods to estimate CO₂ fluxes across the sea surface.

The differences between the two scientific groups were brought to my attention when we received the original manuscript submitted by and finally published by Smith and Jones [1985]. During the review process, all geochemists criticized the manuscript and all physicists applauded it. W. Broecker was invited to provide a response to Smith and Jones [1985] and they and Wesely et al. [1982] were invited to provide replies to Broecker et al. [this issue].

These three papers do not provide a final definitive answer to the conflict in estimates of CO₂ fluxes, but they should establish a baseline for future scientific investigations in this important field. As editor, I encourage the scientific community to use JGR-Oceans as a medium to exchange opinions on important geophysical issues.

REFERENCES


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