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Archer, David. **Global warming: understanding the forecast.** Blackwell Publishing, 2007. 194p bibl index afp ISBN [1405140399](#) pbk, \$39.95; ISBN [9781405140393](#) pbk, \$39.95. Reviewed in 2007nov CHOICE.

Archer (Univ. of Chicago) has done an excellent job of describing the details of how Earth's atmosphere is affected by important factors such as albedo, water vapor, carbon dioxide, etc. He explains their role in the solar energy budget and their effect on global temperatures. Explanations of atmospheric modeling are complete, citing limitations and testing using historical data and proxy data. Archer makes cautious predictions of how global temperature increases will cause worldwide changes in climate, ocean currents, precipitation patterns, sea levels, and regional storms. He addresses the thorny question of what can be done and the effectiveness of human actions. Archer must be applauded for thoroughness of approach. He spends two-thirds of the book explaining atmospheric processes so that readers can understand global warming issues from a scientific viewpoint. His take-home points are a bit concise, and there are several minor mistakes in text, but these are overshadowed by thoroughness of treatment and use of the companion Web site, *Understanding the Forecast* <http://forecast.uchicago.edu>. The latter gives readers opportunities to manipulate data and observe model response. An excellent book for anyone serious about understanding the causes and impacts of global warming. **Summing Up:** Highly recommended. All levels. -- M. Schaab, *Maine Maritime Academy*

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