

Answers to reading check #14

1. True or false: in a hypothetical “bet” between climate change skeptic Scott Armstrong of U Penn and former U.S. Vice President Al Gore, the IPCC’s predicted rises in global temperatures between 2007 and 2012 were soundly confirmed.

False. In fact, Armstrong’s “no-change” forecast had been more accurate in a majority of months.

2. Which substance is the largest contributor to the greenhouse effect?

Water vapor, which is a secondary effect. The theory is that as the other gases warm the atmosphere, the increased heat will allow the atmosphere to also retain more water vapor, further exacerbating the effect.

3. What gas, blasted from volcanoes, has an anti-greenhouse effect and cools the planet instead of warming it?

Sulfur.

4. What’s one advantage Silver mentions that meteorologists and climate scientists share, that (should) help both of them make better predictions?

A strong understanding of the underlying physics of how the system operates.

5. What’s one advantage Silver mentions that meteorologists have, but climate scientists do not, in making their predictions?

Lots of regular (even daily) feedback, which is a reality check that can keep them well-calibrated.

6. The IPCC’s original forecasts overestimated the increase in global temperatures and sea-level rise. What important caveat does Silver cite, however, that should somewhat temper any criticism about their inaccuracy?

The world has reacted to the danger by making changes to their CO₂ emissions and other things. The original IPCC forecasts assumed no such changes would occur.