

Abstract Submitted
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Weather Extremes & Rising Seas as Measures of Global Warming

PAUL H. CARR, AF Research Laboratory Emeritus — Both weather extremes and global sea levels have been rising. We are experiencing more floods, hurricane damage, droughts, and wildfires. Extreme summer heat anomalies now cover about 10% of land area, up from 0.2% in 1950-1980. The number of natural disasters since 1996 costing \$1 billion or more doubled compared with the previous 15-year period. Higher temperature cause dry areas to become drier and wet areas wetter. The latter comes from increased water vapor in the atmosphere. Global sea levels have been rising, in spite of the “Faux Pause,” slowing of the rise in global temperature since 2000 [1]. There was also a pause in the global temperature rise from 1940 to 1970, which is attributed to the cooling effect of aerosols from the coal burning during and after WWII. In contrast, the rate of global sea level rise has been increasing without pause. I will show that the continuing sea level rise correlates with increasing carbon dioxide levels. Thus, sea level rise is a better measure of global warming than temperature.

[1] M. Mann, “Earth will cross danger threshold by 2036,” *Scientific American*, vol 310, April 2014.

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