

Climate Sentinel News

From Dr William Hall, the Editor

VoteClimateOne.org.au/climatesentinelnews

Hon MP/Senator
2023
Member for

7 July

.....
.....
.....

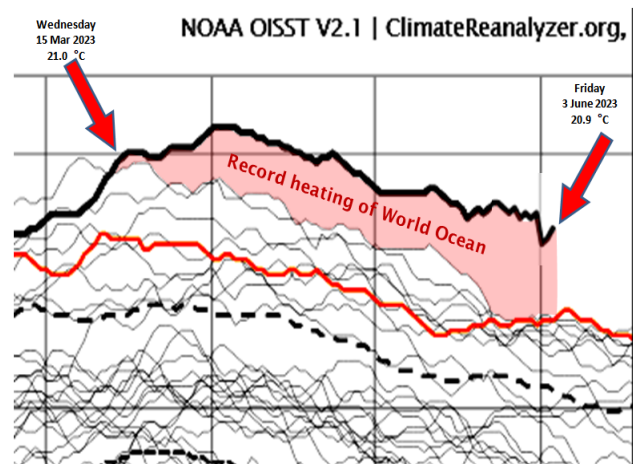
Subject: The climate crisis is a real emergency! Evidence suggests a catastrophic tipping point was crossed mid March 2023. Urgent action is required.

Dear Sir or Madam

As a parliamentarian, you are responsible to respond to this crisis for those who elected you and those you care for. The world faces a real crisis.

The millions of ocean temperature measurements collected for more than 40 years in the satellite era show that the ocean has been progressively warming at a slow but accelerating rate – until March this year when something radically changed.

Around March 15 hot dilute surface water may have stopped ocean currents that normally diffuse the excess heat into the Ocean depths. The area shaded in pink highlights how much WARMER the 70% of our entire planet earth covered by the ocean has become over THE LAST FEW MONTHS! Its cause can be debated. The fact that this extra hot water will cause catastrophic changes to Earth's climates is beyond debate. We'll probably soon feel the effects in Australia as the next major El Nino takes effect over the next few months.



As explained in (<https://voteclimateone.org.au/a-warming-ocean-will-take-its-revenge-on-us/>), the enlarged snip here shows the relevant part of Climate Reanalyzer's plots of https://climaterenganalyzer.org/clim/sst_daily/ (SST) readings for our world's oceans between 60° S and 60° N for every day since 1 January 1981 up to 3 June. The heavy black line plots this year's SST variation, the red-orange line plots the variation for 2022. The dashed line plots a confidence interval of about 95% above the mean value over the 41 years of the record. Thin black lines are for other years (mostly recent ones since 2014). As of the last reading before finalising this post, we are still way over the previous record for this day <https://climaterenganalyzer.org/clim/seaice/>).

The only plausible process I can think of to cause such a large change at planetary scale relates to Earth's thermohaline circulation of the oceans - where oceans cover 70% of Earth's surface and absorb 90% of the excess solar heat trapped by the greenhouse (ref. [Wikipedia](#)). Surface currents heated by the sun in the tropics and subtropics evaporate water and become saltier as they flow towards the poles. As solar heating is diminished by Earth's curvature, currents radiate heat back into the atmosphere and space. The cooling salty surface waters approaching the poles become cold and dense enough to sink into the depths and flow back towards the Equatorial regions.

This year it seems that currents arriving in the polar regions haven't cooled enough to sink to the ocean floor where they can return to the tropics to keep the circulation flowing. If the flow stops, the extra heat melts more ice from ice-shelves and glaciers, releasing more fresh water to dilute salty water that still hasn't cooled enough to sink. Notably, this winter, Antarctic sea ice is freezing at record low rates, and the anomaly is still growing. Based on 42 years of satellite observations, there is less than a 1 in 7 MILLION chance that the reduction in sea ice formation could be random. In complex systems such as weather and climate, radical change like this normally signals a 'tipping point' where the driven variable responds in a non-linear way to a small change in a driving variable – where old rules no longer apply and new ones govern further changes in the system.

These observational facts won't change just because someone denies them or doesn't want to think about them. The linked/attached documents explain the physics behind some genuinely scary readings of key climate change indicators as we pass through winter into what may well prove to be the worst El Niño in Australian history. If you need reasons to trust my motives for writing this, see my Intellectual Biography <https://voteclimateone.org.au/wp-content/uploads/2023/06/William-Hall-Intellectual-biography.pdf>). Over my life I have studied many kinds of complex systems: e.g, climate change and its impacts on species' distribution was a major input to my Harvard University PhD thesis in evolutionary biology; In my 17+ years' employment in Tenix Defence before I retired in 2007, my understanding, managing, and mitigating complex systems' engineering risks help to ensure the on-time, on-cost, unproblematic delivery of 10 ANZAC frigates to the RAN and RNZN.

For the last 7+ years I have focused on the rapidly escalating risks associated with anthropogenic climate change. The increasing frequency, ferocity and extent of extreme weather events over the last 3-4 years shows that damages are already accumulating faster than they are being repaired. There is no evidence from environmental measurements that anything we have yet done has slowed global warming. If the warming continues, humans along with most other large, complex organisms will disappear in Earth's sixth global mass extinction event. Previous mass extinctions were triggered by geological processes. We are triggering this one by burning a significant fraction of Earth's fossil carbon to fuel the exponential growth of industrial technology and to release greenhouse gases that trap heat in the atmosphere. Even the very conservative Intergovernmental Panel on Climate Change (IPCC) and the UN Secretary General are shouting that humans are headed for catastrophe from accelerating global warming if we fail to stop and reverse global warming very soon.

You may also have heard that if 'net zero emissions' are not achieved by 2050 that we will be crossing major 'Earth systems tipping points' such as the shut down of major ocean currents and rapid polar ice melting to cause climate catastrophes. Here the IPCC's conservatism has dangerously understated the urgency of the risk. The data suggests this tipping is happening right now. We need to begin rapid mobilisation for World War III against climate change. Emergency brakes need to be put on to stop all greenhouse gas emissions. Also, absolute priority needs to be applied to research, design, and apply globally scalable systems to capture and sequester excess

carbon from the environment. *Associated with these priorities, we will also need to geoengineer solutions to reflect solar heat to replace the partial protection currently offered by sulfur and particulate pollution from burning fossil fuels.* As in any all-out war for survival, the War Against Climate Change will also probably require rationing, conscription, expropriation and other forms of government coercion to ensure the availability of resources for crucial tasks. Parliaments will be critical in leading the changes and making them work.

Leadership and legislation will be needed!

Too few Australian parliamentarians or parties seem to take climate change seriously enough to prioritise actions to stop global warming, or to take any specific actions to anticipate, manage or remediate the consequences of increasing extreme weather (in terms of the expected frequency, duration, and magnitude of the events). Even many of those who do acknowledge climate change seem to be more interested in protecting their patrons in greenhouse gas emitting extractive, 'development', and agricultural industries than protecting citizens in their electorates.

VoteClimateOne.org.au thinks the need for action is too urgent for us to wait until the next election to elect more climate activists to parliaments. Rather we need to explain the stark reality we face in such a way that parliamentarians can recognize the truth that YOU actually need to accept reality and work out how you can help defeat the enemy threatening us with extinction. (Once you accept the challenge there will be plenty of people who can help you with ideas and technical support.)

[The article here](#) explains the physical science of reality and the laws of Nature that govern the behaviour of water at different temperatures and how weather and climate produced. It then explains how weather and climate are measured, and how these observations clearly show we are headed for disaster if we fail to stop global warming.

The most recent readings for critical climate indicators can be found in <https://voteclimateone.org.au/global-climate-change-now>. We will endeavour to update the readings here once or (preferably) twice a week as long as the climate change indicators remain at clearly dangerous levels.

Regards,

William P. Hall

William P. (Bill) Hall, PhD

[Editor](#), Climate Sentinel News - VoteClimateOne.org.au

Documentation and Knowledge Management Systems Analyst (Ret.)

[Evolutionary Biology of Species and Organizations](#),

PO Box 94 Riddells Creek, Vic. 3431

william-hall@bigpond.com; Ph: 0345 286 246; m & text 0413 740 126

[Google Citations Page](#); [LinkedIn](#); [Facebook](#); [Twitter](#)

