01:07:03 Ted Manning: Over 56 C has been recorded in Death Valley and also in Kuwait.

01:12:28 Claude Buettner: Q: Would the decrease or stopping of the AMOC result in vastly increased atmospheric storms as the earth attempts to equilibrate among the zones with high temperature differences? Has this been well modeled?

01:16:22 Raymond Leury: Q: Everywhere seems to be hottest except for a spot in the northern Atlantic. Is that spot cooler because of the slow down in the AMOC?

01:18:41 William Rees: C: All this and climate change isn't even the core problem, merely a symptom of overshoot!! As a result of our fixation on the symptom, we ignore the disease. Ironically, all efforts to fix the climate are failing to reduce emissions and rates of change and are increasing overshoot.

01:20:37 William Rees: C: Politically acceptable 'solutions' to global heating have failed utterly in the past 32 years (since the UN Framework Convention on Climate Change) to reduce carbon emissions. Reflect the growth-oriented goals of capitalism and neoliberal economics (the prevailing cultural narrative). Solutions include: any capital-intensive investment (e.g., wind and solar power; EVs; non-existent carbon capture technologies; geo-engineering), e.g., techno-fixes that serve the status quo. In short, disaster policy is being designed to serve the capitalist growth-based economy so the latter becomes the solution to (not the cause of) the [problem] (Spash, 2016, p. 931). Spash, C.L., 2016. This changes nothing: The Paris agreement to ignore reality. Globalizations 2016, 13, 928–933.

https://www.clivespash.org/wp-content/uploads/2015/04/2016-Spash-This-Changes-Nothing.pdf

01:21:38 Raymond Leury: C: On June 4th at 7:30PM EST, I'm presenting to the Electric Vehicle Society on EV adoption rates and materials availability. If you are interested, you can sign up by going to https://tinyurl.com/yjbmemp7

O1:25:36 Dave Dougherty: This may be the paper (from March) to which Paul just referred.

https://www.columbia.edu/~jeh1/mailings/2024/Hopium.MarchEmail.2024.03.29.pdf

01:26:14 Raymond Leury: C: For those of you in or around Ottawa, the Electric Vehicle Council of Ottawa (EVCO) has an event at the Blackburn Fun Fair from Friday to Sunday. We will be offering test drives. Details and pre-booking of test drives at https://evexperience.ca/events/

- 01:31:36 William Rees: C: The shift to low sulphur fuels by global shipping has had a marked effect as well.
- 01:32:39 Bill Pugsley: Replying to "This may be the pape..."
- C: Key Quote from Hansen *et al.*: "The 30-year delay in support for nuclear power denied the industry the R&D needed to develop its potential. Based on the amount of material (steel, concrete, fuel, etc.) required for a power plant, nuclear power should be our cheapest energy, if it was supported equally. There is no need to cry over spilled milk, though. By 2030, there should be multiple option for modern ultrasafe nuclear power that can serve as the needed complement to renewable energies to produce carbon-free electricity."
- 01:34:28 William Rees: Replying to "This may be the pape..."

As noted above, the IPCC process is arguably fatally politicized.

- 01:35:31 David Pollock: Q: Paul, you mentioned AMOC collapse possible in a decade or so? Is that the best estimate on the timeline?
- 01:37:03 William Rees: C: The climate system is characterized by lags and thresholds. There is a delay between cause and effect.
- 01:49:14 William Rees: C: Keep in mind that the 1.5 and 2.0 Celsius degree 'thresholds' are arbitrary, largely political 'goals' --they are not 'scientifically' defined.
- 01:50:48 Bill Pugsley: Replying to "Keep in mind that th..."
- C: Excellent point, Dr Ree. The business as usual estimated temp is a much more important scientific temperature to watch and last time I looked was around +3.5 C.
- 01:55:13 Jon Legg: Q: Paul, I heard not mention of the two longtime fears: i.e. juxtapositions of two negative trends: a) methane thawing and its effect on greater warming, and b) loss of albedo.
- 01:57:02 Jon Legg: Q: Finishing the previous question: Did I miss a mention of these two negative possible events?
- 01:57:03 Melissa Koch: C: I am concerned for all of the other species we share the earth with. We have such a responsibility to cool the planet to save as much life as possible.
- 01:57:52 William Rees: C: "Climate scientists don't really know what's going on." We are "unable to reconcile our theories with what has happened." (Gavin Schmidt, Director NASA's Goddard Institute for Space Studies [March 2024])

02:05:25 Dave Dougherty: C: Here is the website Paul mentioned.

https://earth.nullschool.net/

02:08:32 Dave Dougherty: C: Mexico City's 2024 population is now estimated at

22,505,315.

https://worldpopulationreview.com/world-cities/mexico-city-population

02:09:31 Claude Buettner: William R. Catton, Jr, wrote *Overshoot* referred to by

Paul.

https://www.amazon.ca/Overshoot-Ecological-Basis-Revolutionary-Change-ebook/dp/B00VVH4UGG/ref=sr_1_1?crid=YOIK1X3UI2ZI&dib=eyJ2IjoiMSJ9.Uc9RCu5-hxAqMgEwdzPjO0hu-hjj5P-Nc9IwWDOLP SonkqqXR6JRtbQ7-

qwLpbIWR6OC5UZU1mK8i1aQvLOcL7bxpqYBt2NgtzCsq_ugaWobTin5eG_B57gQpN6ldv0ikQOjth16l_OAH9Y7BpExenyFK_b1TQAoOfVaAciiyS3pDCG4mJfTviuDjZLILP8wuRn9p7AM5PqLguRpbjgnZV3jqA5rSdf9wLVel94GJk.gamECCSS1Vd9GKKGvSUBrRqNitpLOWDc9ulV4nlaS5c&dib_tag=se&keywords=overshoot&qid=1717007727&sprefix=%2Caps%2C129&sr=8-1

02:11:17 Dave Dougherty: C: Report by Lenton. New study identifies 'positive tipping points' that can be leveraged to prevent the collapse of the Earth system - Earth Commission.

https://earthcommission.org/news/new-study-identifies-positive-tipping-points-that-can-be-leveraged-to-prevent-the-collapse-of-the-earth-system/

02:16:20 Jamen Shively: C: All models are wrong, but modeling is essential.

02:23:20 Raymond Leury: C: If you want more about disinformation, read *Merchants of Doubt*, which was written 15 years ago but could have been written today. Merchants of Doubt - Wikipedia

02:34:47 William Rees: C: Thank you, Paul, for a great presentation and everyone for stimulating discussion. Gotta go.

02:35:21 Jamen Shively: Replying to "Thank you Paul for a..."

Hear hear!! Great session today Paul, and thank you CACOR!

02:36:24 Marco Elstermann: Thank You. Paul! and CACOR!

02:38:15 Melissa Koch:Thank you, Paul.