Predictions Pitfalls and Failures

In God we Trust, all others bring Data

Presentation to CASF by B. McCune Predicted for February, 2021 (Originally Scheduled for January 16, 2021) "It's tough to make predictions, especially about the future" - Yogi Berra

Shall I try?

- There will continue to be a host of predictions in the near future and years to come
- I predict that almost every one will be wrong
- Even in the emerging technology field where we have a lot of insight, we cannot easily predict the next breakthrough (fusion energy?)
- Typical prediction scams all usually involve our financial future so at the very least, in the face of these new and untested predictions, hold on to your money

The Issues - why most predictions go wrong

- They are based on bad or non existent data
- They are simply opinions with very little basis
- They are based on popular myths
- There are regular, very fundamental changes along the way to the future that are mostly un-predictable
- Some folks call them breakthroughs
- Some bad predictions are intentional financial scams (gaming the system) but most are due simply to ignorance

Trustworthiness

SEPP Quote of the Week 1-31-21:

"By honest I don't mean that you only tell what's true. But you make clear the entire situation. You make clear all the information that is required for somebody else who is intelligent to make up their mind." – Richard Feynman

- The small amount of thought, effort and testing going into most predictions allow for very little confidence in them
- Trust, even in our basic democratic principles seems to be losing ground nowadays
- Trust in science is waning and the use of the scientific method seems unfashionable these days
- Fairy tales and making things up seems to be much more popular

The wisdom of Thomas Sowell

* Common Sense in a Senseless World

- "Good intentions without wisdom leads to bad outcomes"
- "Some things are believed because they are demonstrably true, but many other things are believed simply because they have been asserted repeatedly"
- "The first lesson of economics is scarcity: there is never enough of anything to fully satisfy all those who want it

The first lesson of politics is to disregard the first lesson of economics"

*https://www.youtube.com/watch?v=WK4M9iJrgto

Ignorance or Ignoring the facts

- If it is the subject of the law neither of the above will relieve you of your responsibility
- True ignorance of the science is at least forgivable
- But many folks these days are intentionally ignoring the facts when they know better
- There is no excuse for this

Predictions vs. Thought lead the way

- Early incomplete analysis often leads to predictions of momentous outcomes (that are usually wrong)
- However, only a careful and wide search for data and insight into a new subject should be undertaken before even preliminary predictions can be made
- This process must be followed with a goal of truth and trust in the methods as key
- Show your work! Make sure there is plenty of it!

Forecasting Methods - Scott Armstrong

- Evaluate these methods in situations in which they will be used
- Test methods against reasonable alternatives
- Four steps: testing assumptions, testing data and methods, replicating outputs and assessing outputs
- A major pitfall is the mis-use of statistical methods, including knowing when and how to use them
- Many researchers (especially academic ones) violate most of these accepted principles
- A chapter in his book, Principles of Forecasting: A Handbook for Researchers and Practitioners, on Evaluating Forecasting
 Methods has a check-list of 32 principles to help evaluate forecasting methods (Armstrong was involved in business and financial forecasting)

A few recent failed predictions

Global Warming - Climate Change

https://wattsupwiththat.com/2021/01/02/10-failed-predictions-video/

- Wuhan Pandemic and Outcomes (Vaccine proponents)
 - Using flawed or no data to predict outrageous outcomes
- Financial Futures little data and chaotic processes
- Political winners and losers

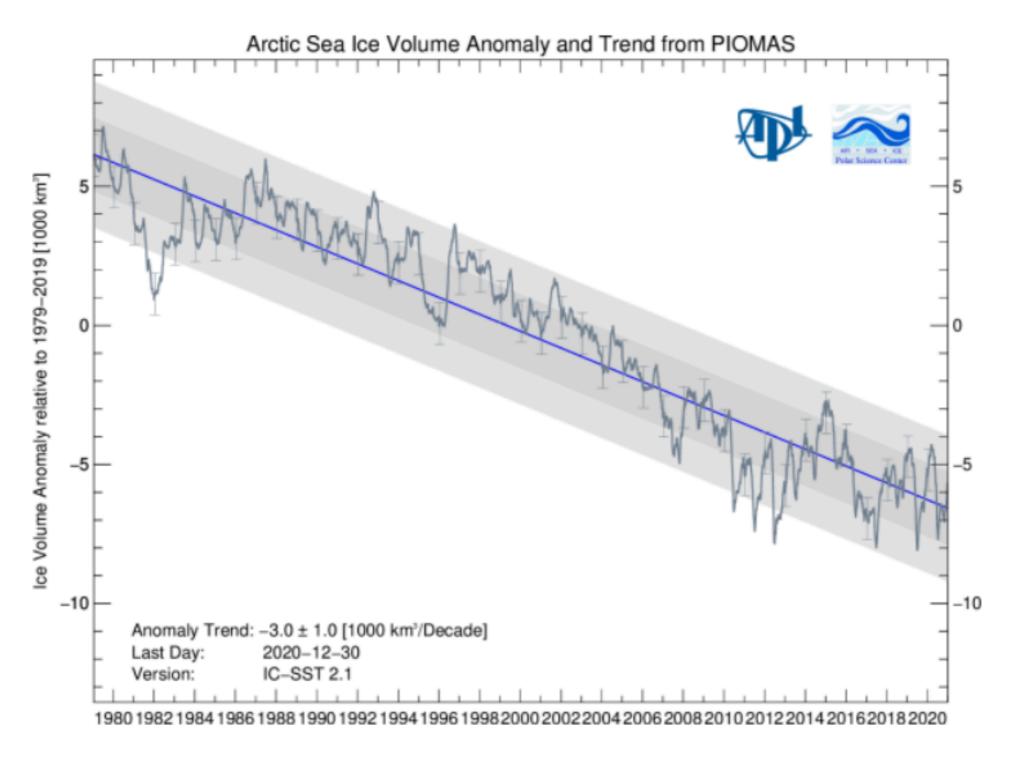
Use of predictions to control the situation

- The first question before making any predictions is -Who or What is in control?
- Correctly answering that question may completely change a future outcome thus making any sort of an early prediction, nonsense
- How accurately can one predict chaotic natural processes?
- Control of an unpredictable situation may be a problem
- Some success in this sort of process has been seen in short term weather forecasting

Some necessary elements of understanding and making predictions

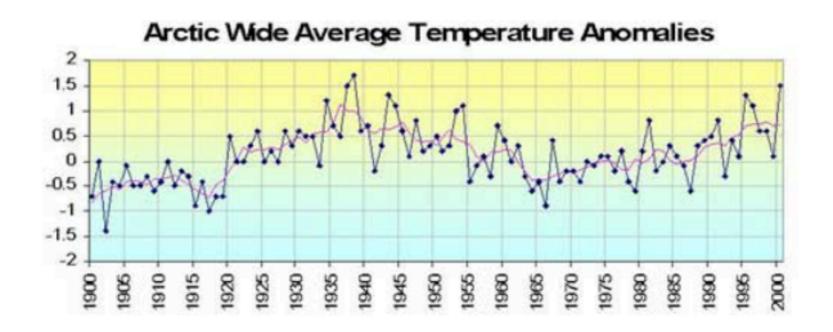
- A deep and wide understanding of the basic process
- Plenty of and a solid trust in the data
- Is the process stable or is it chaotic (or at least cyclical)?
- Natural and financial processes are rarely stable
- If they are cyclical, what is the period?
- It is important in cyclical processes to find the actual period so that fractional periods are not used to determine trends (using fractional periods has often occurred in global warming predictions)

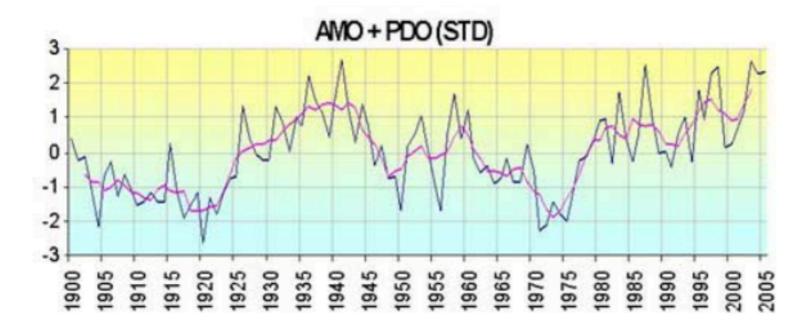
Arctic Ice Loss



Source: [http://psc.apl.washington.edu/wordpress/wpcontent/uploads/schweiger/ice_volume/BPIOMASIceVolumeAnomalyCurrentV2.1.png]

The Rest of the Arctic Ice Story





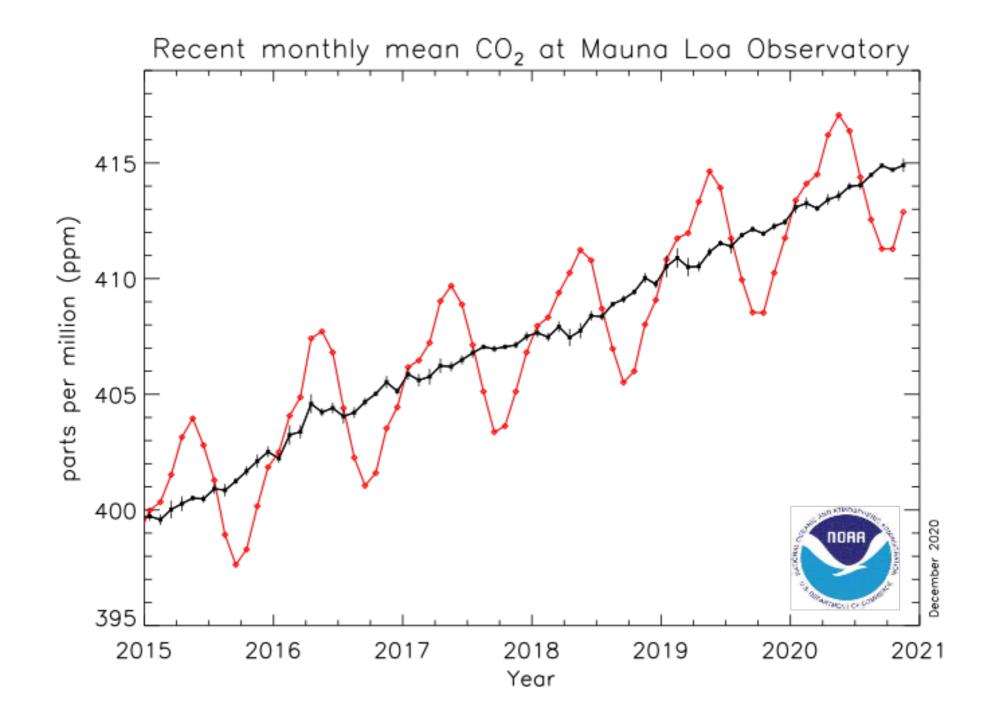
Arctic basin wide temperatures from Polyakov (2003) versus PDO+AMO (STD). Dark blue is annual and purple 5 year running means.

A Success

- Short term (days) weather prediction is a success story
- Limits to much longer than 5 or 6 days has a lot to do with initial conditions guiding the forecast and becomes a limiting factor
- Accurate long term weather prediction of a month or more is just a dream
- Climate forecasting of 100 years is presently impossible
- There are cyclical climate factors that may give us a hint of what might happen over 60 or 100 years or more

Failures of Climate Change Predictions

- Most present day climate (or should I say global warming) predictions are based on human emissions of CO₂
- It is very important at the start to get cause and effect right
- Climate scientist's claims that are noted in the first bullet above have been shown to be false
- It is not straightforward to separate effects of human and natural CO₂ emissions but recent pandemic activity indicates that the natural emissions from the global oceans far exceed those of humans



During the first part of 2020 human emissions dropped 4 gigatonnes (from 34 gt to 30 gt). When human emissions were last at 30 gt in 2010, Mauna Loa recorded about 390 ppm of CO₂ in the atmosphere. There is no discernible change in the upward trend in 2020.

This simple failure to understand the basics of climate have serious implications for human endeavors concerning future predictive outcomes of life on the planet that include our energy use, our effect on the plants, animals and atmosphere of the planet, the ultimate destruction of the planet and all its life forms, our trust of all other scientific predictions and on and

Some other failed predictions

- Beyond the numerous failed predictions noted in the beginning of this presentation there are many more
- Over the past several hundred years as our scientific knowledge has slowly grown there were numerous and famous examples of failed or shunned correct predictions shown in the many hypothesis presented in all fields of science
- It is a cautionary tale that demands we remain vigilant in promoting false predictions or naysaying in the case of correct predictions
- Skepticism is very important in all cases that relate to predictions

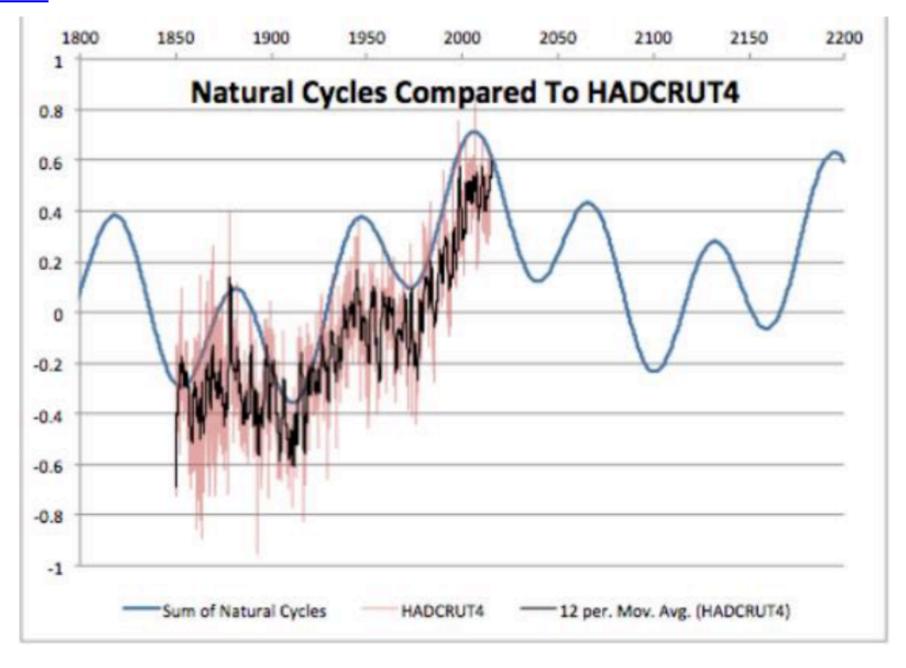
Final Thoughts

- Scott Armstrong's extensive work on forecasting basics indicate how little thought goes into most predictions (especially recent ones)
- Data is important but a very analytical approach to mining, sorting and combining the data is also extremely important
- Using models and predictions for scientific enlightenment is one thing, but when they are used in making policy, there must be a very rigorous validation and verification process involved in their certification for that purpose
- Both models and predictions must be verified by real world experimentation and testing

 For many Artificial Intelligence tasks, machine simulations are more productive than mountains of data

An Ed Caryl Prediction

A past presentation I made to CASF discusses skeptical models https://casf.me/climate-models-developed-by-skeptics/



And when predictions and expected outcomes fail.

. . CHEAT!

especially when it is for the greater "good"

Some Recent Election Fraud Evidence

- See Bob's presentation for some of the evidence (I refer to his work later in this presentation)
- And find a concise look at more recent evidence here: https://vimeo.com/search?q=Unmasked+2020+Election

Election Fraud

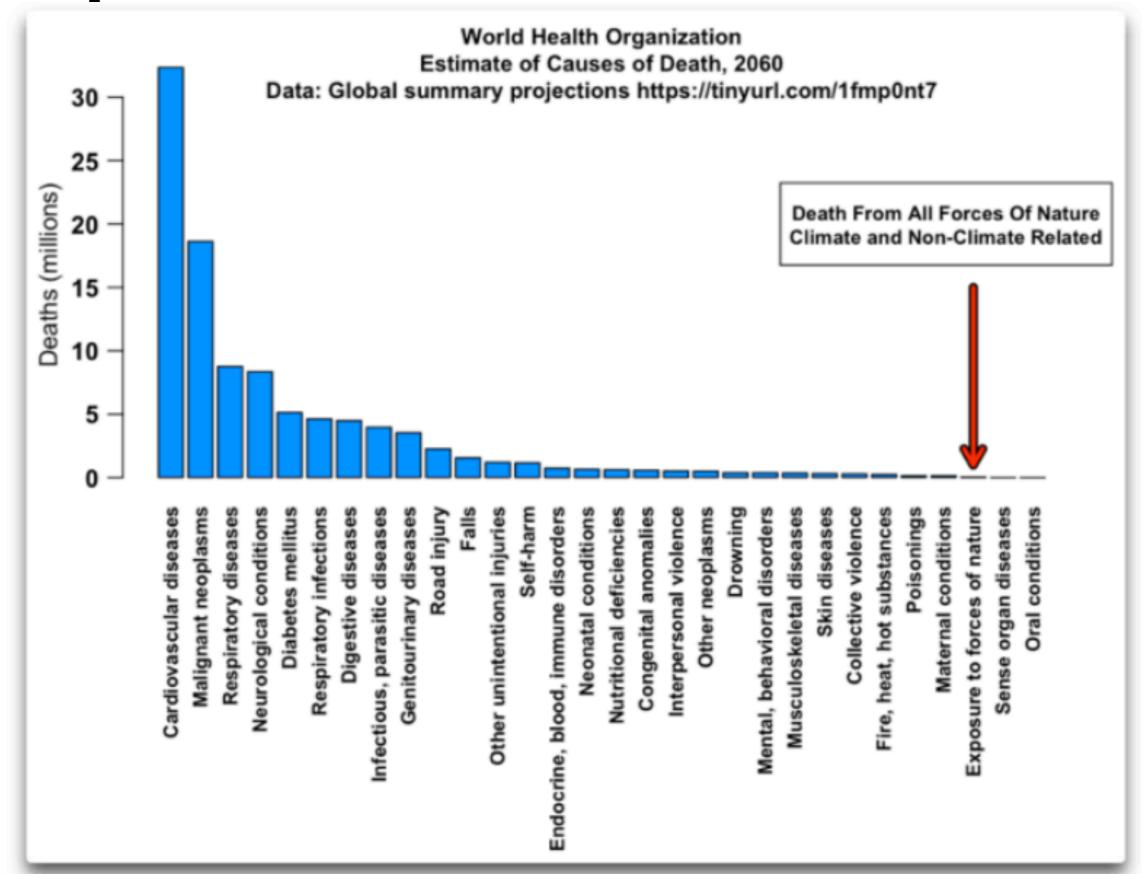
A prediction if we ignore it

- A loss of trust in the vote, civil unrest or worse
- Refer to Bob Endlich's complete look at some questionable vote jumps and probable switches
- The ongoing issue of certifying the vote is this the best we can do?
- Block chain certification and voting on the network see the next slide for issues
- Certification of the voters illegal aliens, ghost and dead voters
- Completely transparent vote counts and checks

New Voting Methods

- Block chain cannot certify inputs
- But it can, if carefully crafted, keep the input to output process from being changed (manipulated)
- By carefully assuring certified voters, solid in person and even online voting can be assured
- Any other modifiable input methods should be considered suspect (sloppy mail in ballots)
- By rooting out fraudulent activities by people that allow illegal voters or votes to be entered into the chain, we can assure that fraudulent elections will not occur

A prediction from the WHO



Videos and Reports for more details

https://www.heartland.org/news-opinion/news/climate-prediction-swings-and-misses-a-decade-of-alarmist-strike-outs-2010-2019

https://www.heartland.org/Center-Climate-Environment/

Scott Armstrong

http://climateconferences.heartland.org/scott-armstrong/

Forecasting Principles and Paper on Climate

https://www.researchgate.net/publication/ 284723997_Are_dangerous_warming_forecasts_consistent_with_the_Golden_Rule

https://journals.sagepub.com/doi/10.1260/095830507782616887

John Christy on Elements of Climate Change

https://www.youtube.com/watch?v=EvO7bBuTRno

10 Climate Predictions that went horribly wrong (the written version)

https://www.thegwpf.com/ten-climate-predictions-for-2020-that-went-horribly-wrong/

Videos Discussing Some Fundamental Ideas

Prediction by the Numbers NOVA

Statistics and probability in the predictive process https://www.pbs.org/wgbh/nova/video/prediction-by-the-numbers/

In Money We Trust?

Why we trust or do not trust money (is it stable and reliable?) https://www.pbs.org/video/in-money-we-trust-ox607a/

Dennis Prager Thoughts on the Current State of Our Nation

Wide ranging discussion highlighting the American Trinity https://www.prageru.com/video/ep-168-thoughts-on-the-current-state-of-our-nation/?utm_source=Main+Mailing+List&utm_campaign=93919016e3-EMAIL_CAMPAIGN_10_8_2020_16_32_COPY_01&utm_medium=email&ut m_term=0_f90832343d-93919016e3-178862346

The "End" is Not Near

Predictions of Future Doom continue in spite of data to the contrary

We can't even "sell" the reality of the past trends

https://www.thegwpf.org/content/uploads/2021/02/Goklany-EmpiricalTrends.pdf

Much less that those trends will likely continue into the future