**Science Topic 03-30-24. Updated in newsletters Apr'25, Nov'25, and Dec'25.**

# CliSciPol

## Climate Science and Policy for Nonscientists

One picture is worth a thousand words.

## THE PARIS AGREEMENT GOALS AND TIPPING POINTS

The primary driver of climate change is rising temperatures, and temperatures are rising at a relatively linear rate, so the responding climate changes tend to be linear, not accelerating or unstable, as proposed by the theory of Tipping Points.

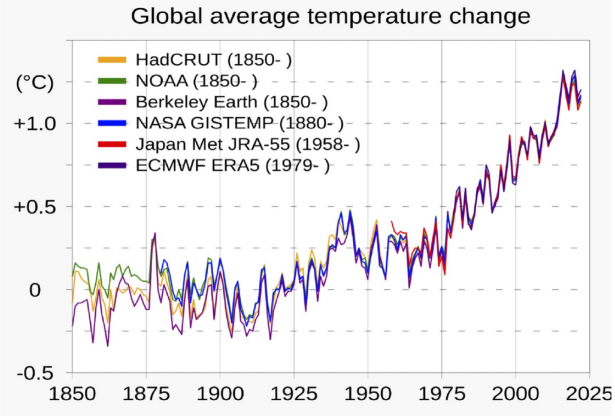
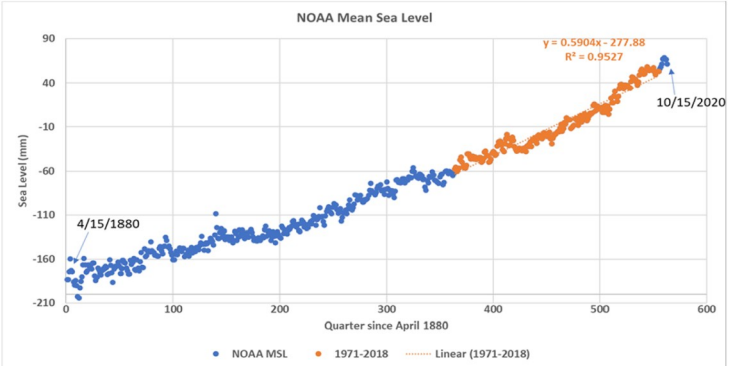



Figure 1 Global average temperature anomaly.




For example, sea levels have been rising at a relatively linear rate. Precipitation is projected to increase at 1-3% per degree C. (AR6 WGI p.615). Heatwave temperature extremes tend to increase linearly with global warming. (AR6 WGI p.1554).

When there is an extreme departure from the trend, such as with the US Heatwave Index in the mid-1930s, the climate does not "tip." Rather it returns toward the mean in accordance with Le Chatelier's Principle, which states that natural systems demonstrate negative feedbacks - they return towards the previous mean. The theory of Tipping Points is based on there being positive (accelerating or destabilizing) feedbacks in nature.