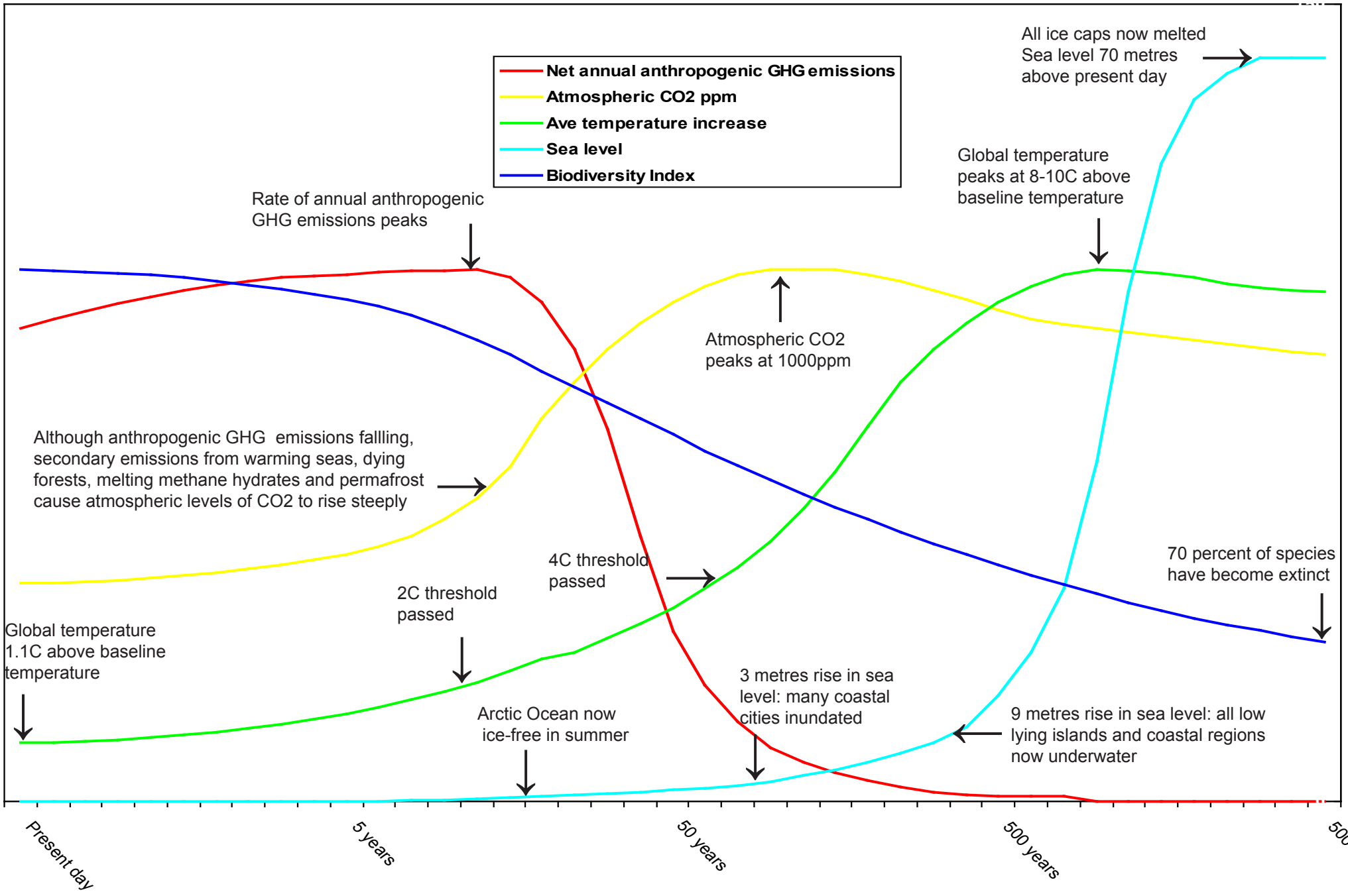
Climate Crisis Calendar

Time horizon	The past	The future (food security and international agreements)	The future (current AGW* trajectory) * Anthropogenic global warming	The future (agriculture and nut crops)
1-7 days			Food stocks held in homes	Shelf life of fresh foods
1-3 weeks		Typical international response time to humanitarian crises	Maximum availability of food supplies held in supermarkets	Maximum storage life of most perishable foods
1-9 months	2019 record year for forest fires Greenland icecap melting at unprecedented rate (summer 2019) Atmospheric CO2 hits 415ppm (May 2019)	Upper limit of most official thinking on food security (keeping supermarkets stocked)	Maximum availability of food supplies held in global supply chains	Maximum longevity of fresh foods in supply chain between field and supermarket
1-3 years	UN advises that in order to reduce impact of AGW, human diets will have to move away from animal products (2018) Atmospheric CO2 exceeds 400ppm (2017)	Remaining time window for implementation of global measures to limit AGW to below 2C (if not already too late)	Period of pretence that any necessary action on global warming can be deferred Supply capability of existing global emergency food stores (for those with the money to pay)	Establishment phase of new nut orchards
2-7 years	Destruction of rainforests continues at around 5 million hectares per year GHG emissions from agriculture continue to increase	Maximum forward planning for production of most staple foods	Climate scientists confirm that 2C target now unattainable. Unavoidable global warming trajectory determined to be 3.5C+	Minimum period for planning and implementating new agricultural strategies aimed at climate change mitigation/adaptation (5 years+)
5-30 years	One fifth of remaining rainforest lost Agriculture cited as a major driver of global warming (IPCC 1990) Land available for agriculture peaks as land degradation exceeds new farmland created through deforestation (1998)	Maximum forward planning horizon for most national and international agricultural policies	Global food output peaks Period of increasing negative outcomes from global warming, also increasing levels of denial. Annual greenhouse gas emissions begin to slow, but not by much. Atmospheric levels of CO2 continue to rise. Arctic Ocean ice free in summer.	Development phase of new nut orchards (first crops at 6-10 years) Minimum time frame (20 years+) for large scale planting of nut orchards for food security purposes
20-125 years	Fossil fuels supersede animal power in agriculture One sixth of world's remaining forests lost to logging and agriculture Technological revolution in agriculture leads to massive increase in yields	Reference period for international commitments on greenhouse gas emission reduction (present day to 2100)	End of oil era Atmospheric CO2 increases throughout this period Vulnerable coastal regions inundated by rising sea Global food production in sharp decline First catastrophic global famines. Significant species' die off	Peak production reached in new nut orchards (in most cases 20-50 years from planting)
100-500 years	Potato reaches Europe (c1570) Start of industrial era (late 1700s) Potato famine in Ireland (1845-1849) Horse supersedes oxen but slaves still widely used in agriculture until mid 1800s	Outside of reference period used for international commitments on GHG emission reduction (mainly because the likely outcomes are so terrible)	Many low lying coastal regions inundated by sea Collapse of global agriculture Large areas of mid latitudes now uninhabitable Human population crashes to below 1 billion. Massive species' die-off	Potential lifespan of many nut orchards
500-2500 years	Plough invented (China 500BC) Earliest selective breeding of crops (c500BC) Vikings establish farms in Greenland (985) Collapse of Anasazi civilisation (c1280) Devastating famine in Europe (1315-17)	Upper reference period for climate change scenarios considered by IPCC and other climate scientists	Maximum impact from AGW Sea levels stop rising (all ice that can melt has melted, and thermal expansion of oceans stops) Further die-off of many species Survival of human species uncertain	Maximum lifespan of nut producing trees (1000-1500 years in the case of ginkgo, araucaria and some pines)
2000-12000 years	First grain crops sown (c10000BC) First nut orchards planted (c3000BC) First recorded climate related agricultural disasters (c2200BC)	Out of sight, out of mind (occasional mentions in peer-reviewed literature on climate change)	New climate equilibrium eventually established (c10000 years). Climate stability allows modest agricultural recovery (if anyone has survived)	
12000 years+	Pre agricultural period	Never never land	Ecological equilibrium eventually re-established	

 Abbreviations: AGW - anthropogenic global warming; GHG - greenhouse gases; CO2 - carbon dioxide; IPCC - Intergovernmental Panel on Cliimate Change

Climate Crisis Timeline



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