

Atmospheric & Earth Sciences 07/30/2021

Discovery: Reduction in
photosynthesis correlation to
atmospheric CO₂ increase.



A & E S

❖ Agenda

- ❖ I-Atmospheric CO₂ is not an emissions issue
- ❖ II-Sea Level Rise is 1.4 mmyr⁻¹ and not accelerating
- ❖ Summary



I-Atmospheric CO₂ is not an emissions issue

- ❖ Follow the data
- ❖ Global carbon atlas.
- ❖ Why its not our emissions
- ❖ Where we are
- ❖ Mauna Loa CO₂ Growth Rate
- ❖ Where we are going
- ❖ Future
- ❖ Photosynthesis issues
- ❖ Correct solution for Atmospheric CO₂ with results!
- ❖ Global Warming Potential



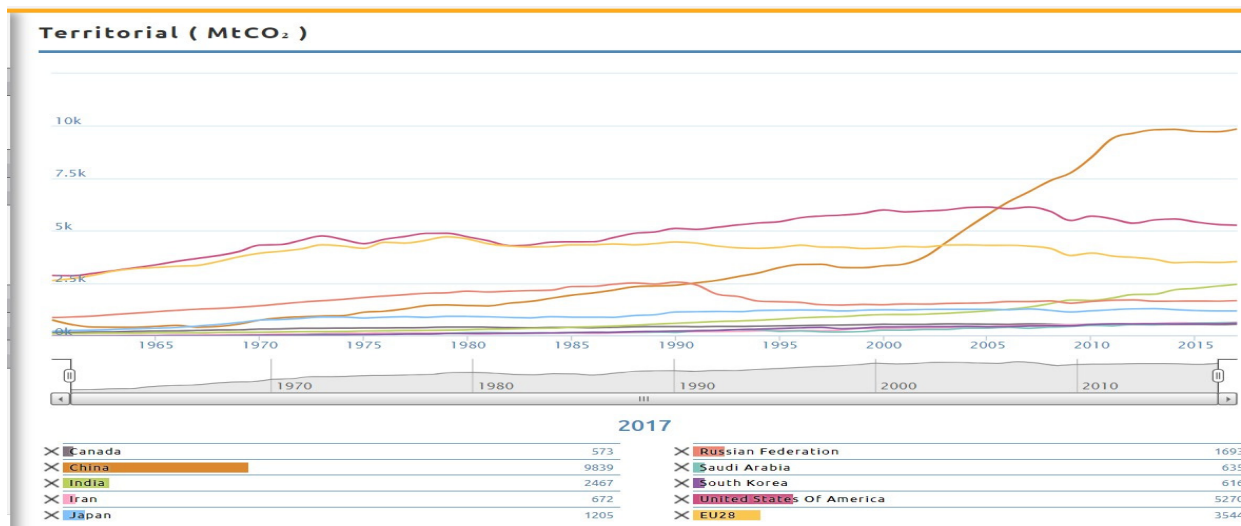
Follow the data Not an Agenda

- ❖ Use all the data- don't cherry pick
- ❖ See what the data says. Perform statistical analysis.
- ❖ All models must be verified with actual data.
- ❖ This presentation is the result of following the data.
- ❖ Nature Climate Change is a better Journal.



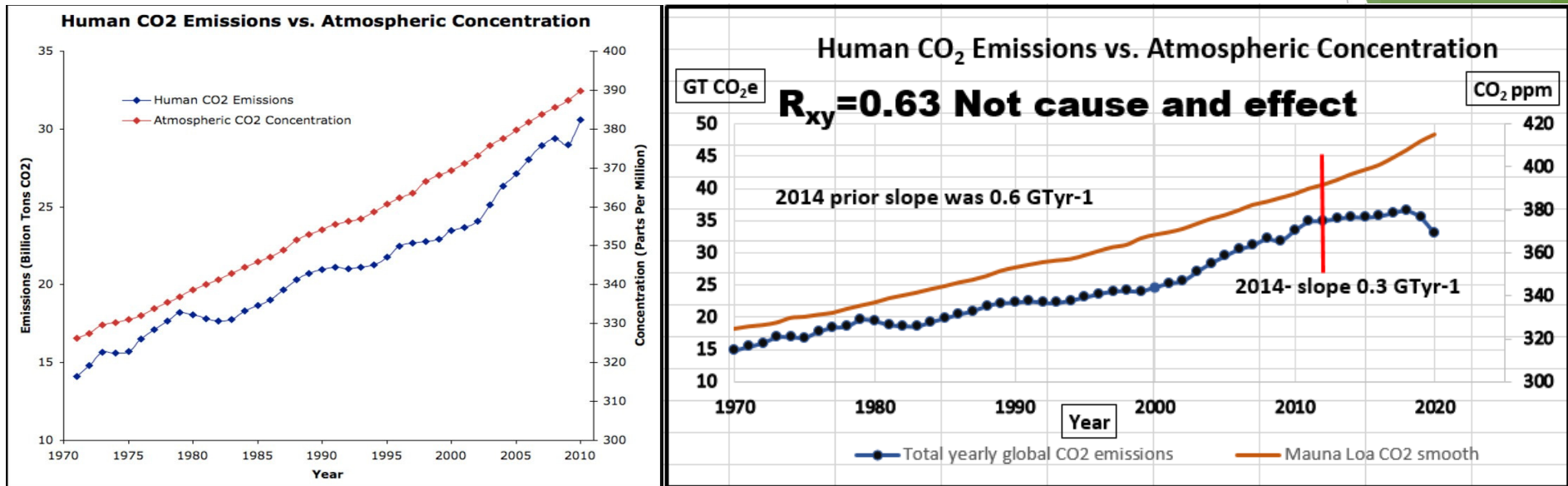
Global Carbon Atlas

- ❖ USA 2006: 6131 MtCO₂ and in 2018: 5270 MtCO₂ --a 16% decrease of CO₂.
- ❖ Europe 1990: 4479 MtCO₂ and in 2018: 3544 MtCO₂ --a 21% decrease of CO₂.



Where we are

❖ After spending \$2.8 trillion we have:



2008 $r_{xy}=0.87$

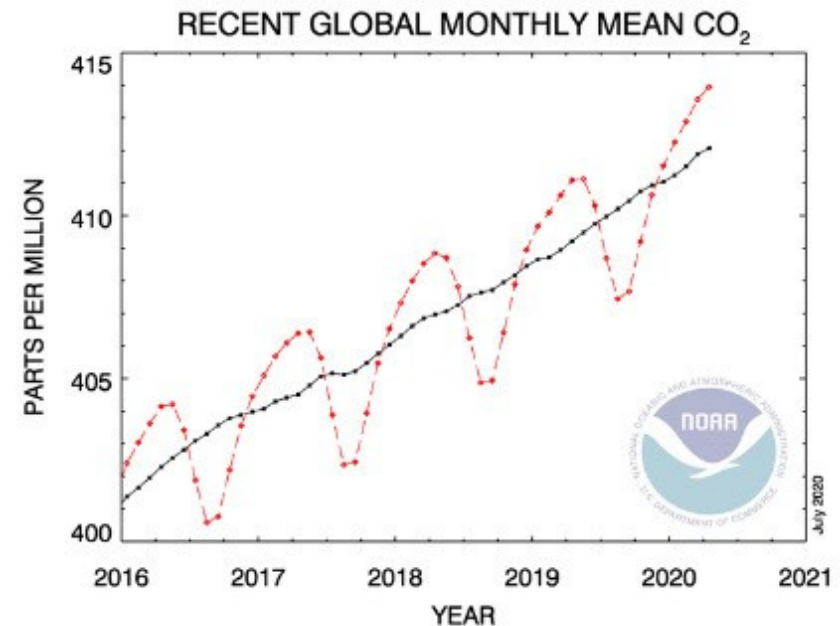
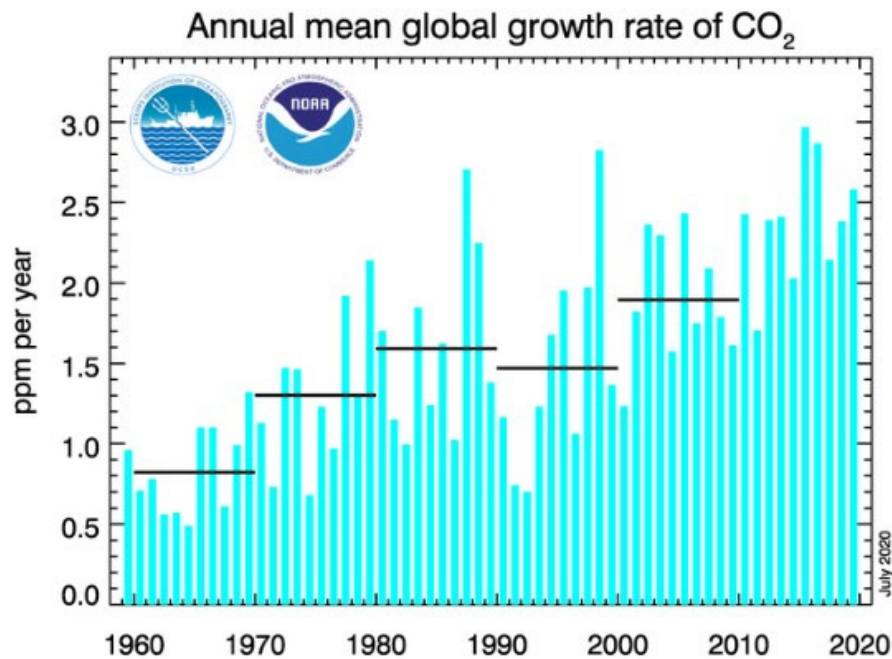
2021 $r_{xy}=0.63$

❖ We have had mostly lower fossil fuel emissions since 2014. Massive deforestation continues!



Mauna Loa CO₂ Growth Rate

- ❖ Annual mean global CO₂ growth rate is increasing.



Where we are going

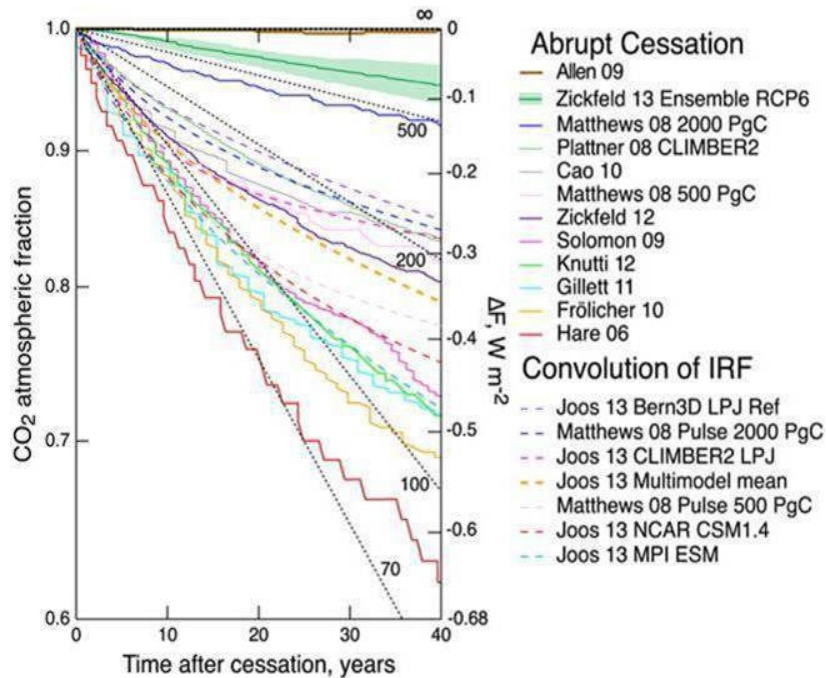
❖ Facts

- ❖ Minimum residence time 150 years. Was 5 years
- ❖ Most work is on carbon emission reduction
 - ❖ Reforestation efforts in China and North America ongoing.
- ❖ Atmospheric CO₂ is “Extra” that is not consumed in photosynthesis

❖ Assumptions

- ❖ Keep current carbon emissions level at 35 billion metric tons annually.
 - ❖ Decreases of carbon emissions will be offset by increases in population
- ❖ Atmospheric CO₂ stays the same slope.
- ❖ At 100 years no more oil so carbon dioxide emissions drop by 30%

Residence Time of Atmospheric CO₂

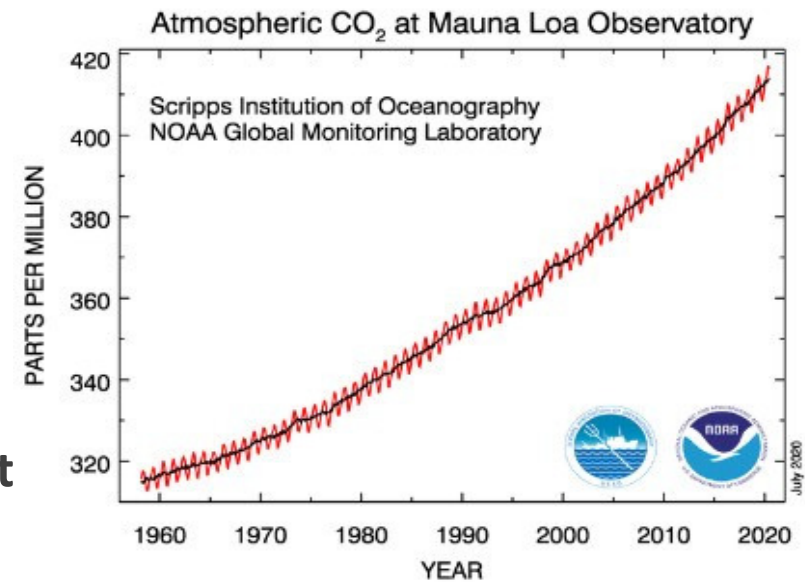


Residence Time (Years)	Author	Year
>700	Allen	2009
610	Zickfeld	2013
500	Matthews	2008
300	Plattner	2008
270	Cao	2010
230	Zickfeld	2012
220	Solomon	2012
220	Knutti	2012
210	Gillett	2011
180	Frölicher	2010
150	Hare	2006

- ❖ Unrealized Global Temperature Increase: Implications of Current Uncertainties, Schwartz, S. E. J. Geophys. Res. , 2018, doi: 10.1002/2017JD028121.

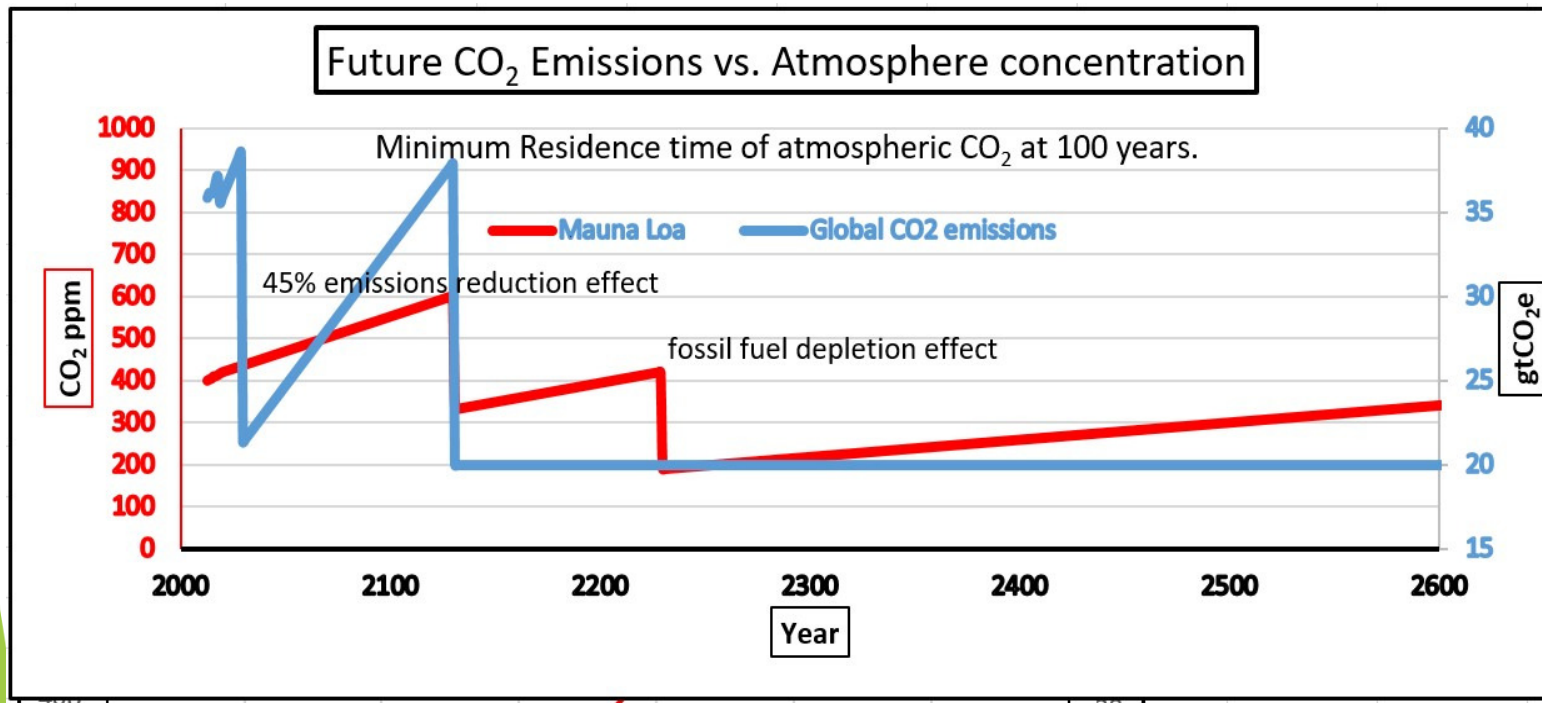
Residence Time

- ❖ Another way to look at residence time is a signature from past events, which lowered CO₂ emissions.
 - ❖ Oil embargo in the 1970's
 - ❖ Multiple recessions
 - ❖ Worldwide recession in 2009.
 - ❖ COVID-19 pandemic.
 - ❖ **You can clearly see no signature from these event**
-
- ❖ Netflix watch “Kiss the ground” movie explains even if we stopped all CO₂ emissions atmospheric CO₂ will not lower.

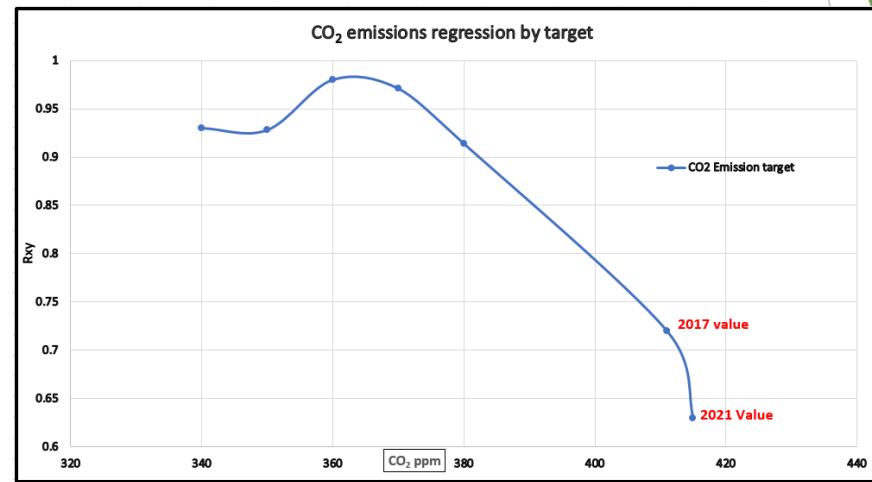
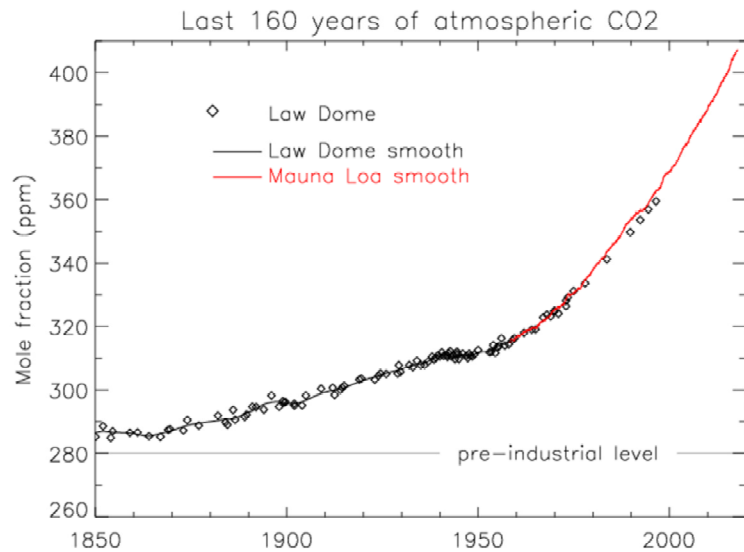


Future with residence time 100 years

- ❖ CO₂ emissions correlation shrinks with passing of time.
- ❖ Goes to zero at 580 ppm, Year 2060

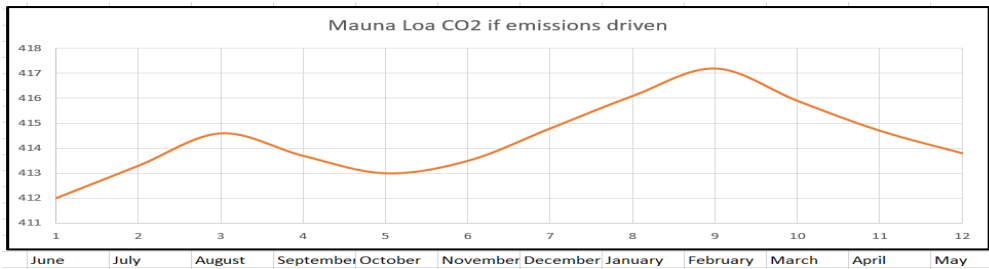


Pearson's regression

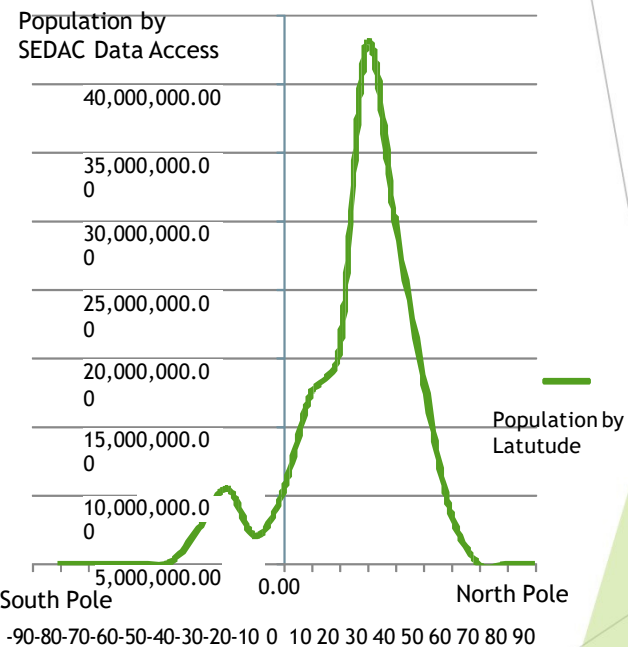


Why its not our emissions

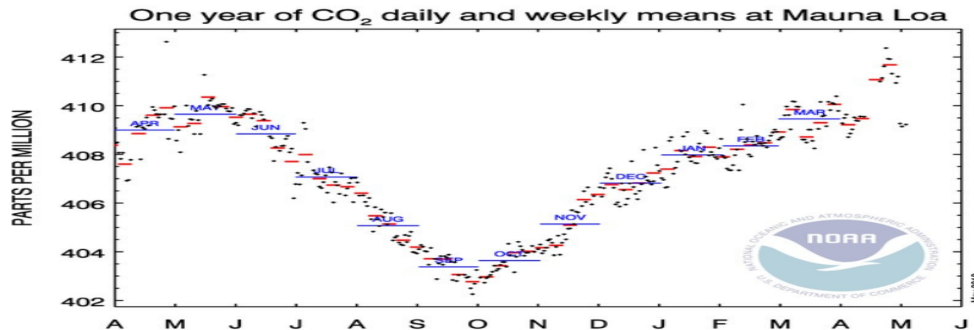
- ❖ 90% of People live in Northern Hemisphere
- ❖ 90% of our emissions:



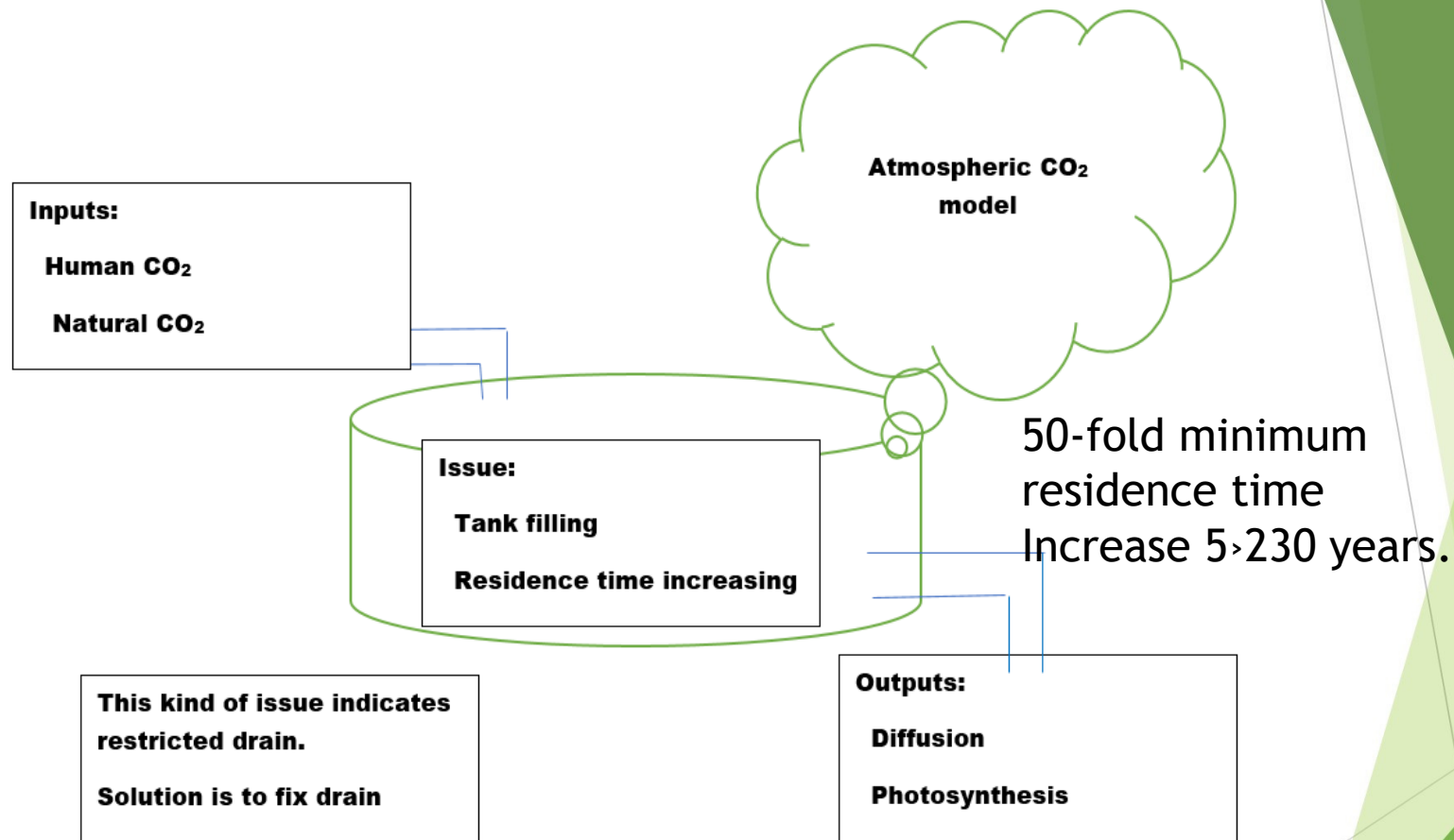
World Population by latitude



❖ Mauna Loa cycle for carbon dioxide



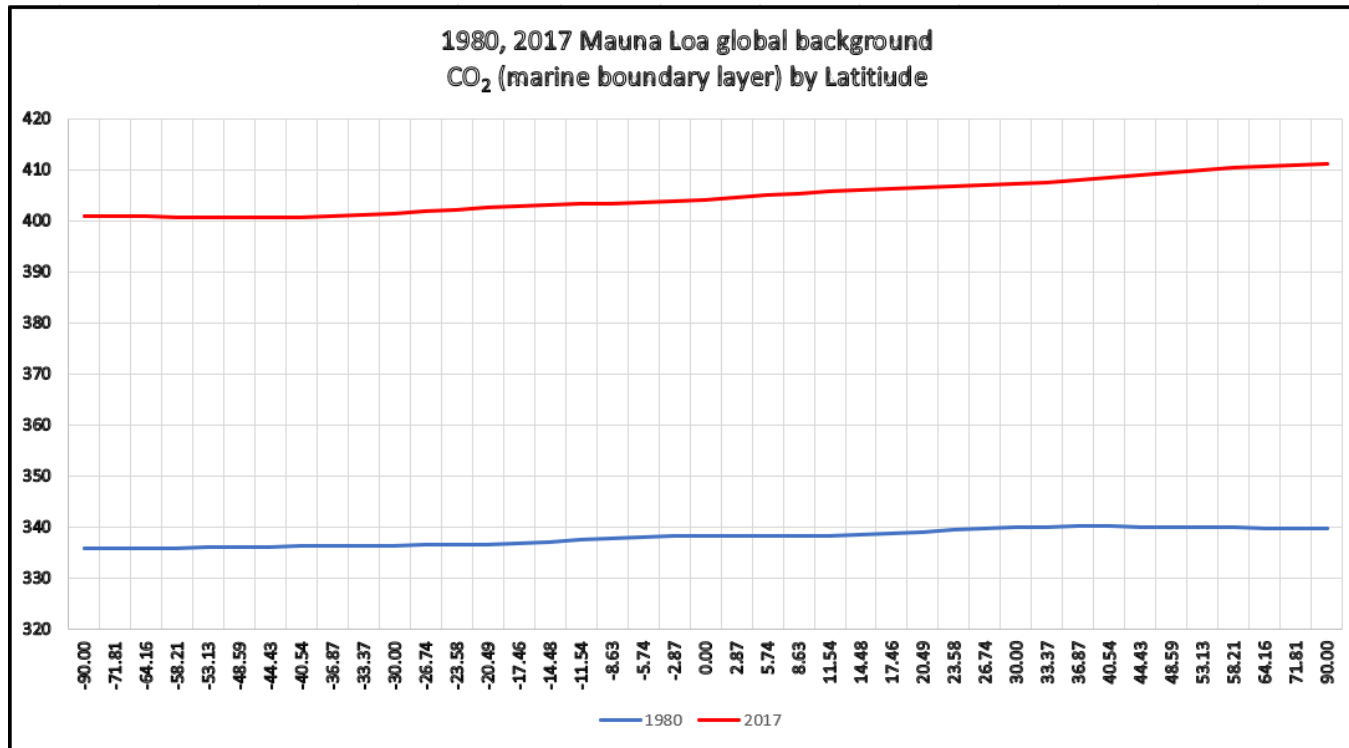
Atmospheric CO₂ Tank Model



What Photosynthesis could be 55 ppm?

Atmospheric CO₂ by latitude

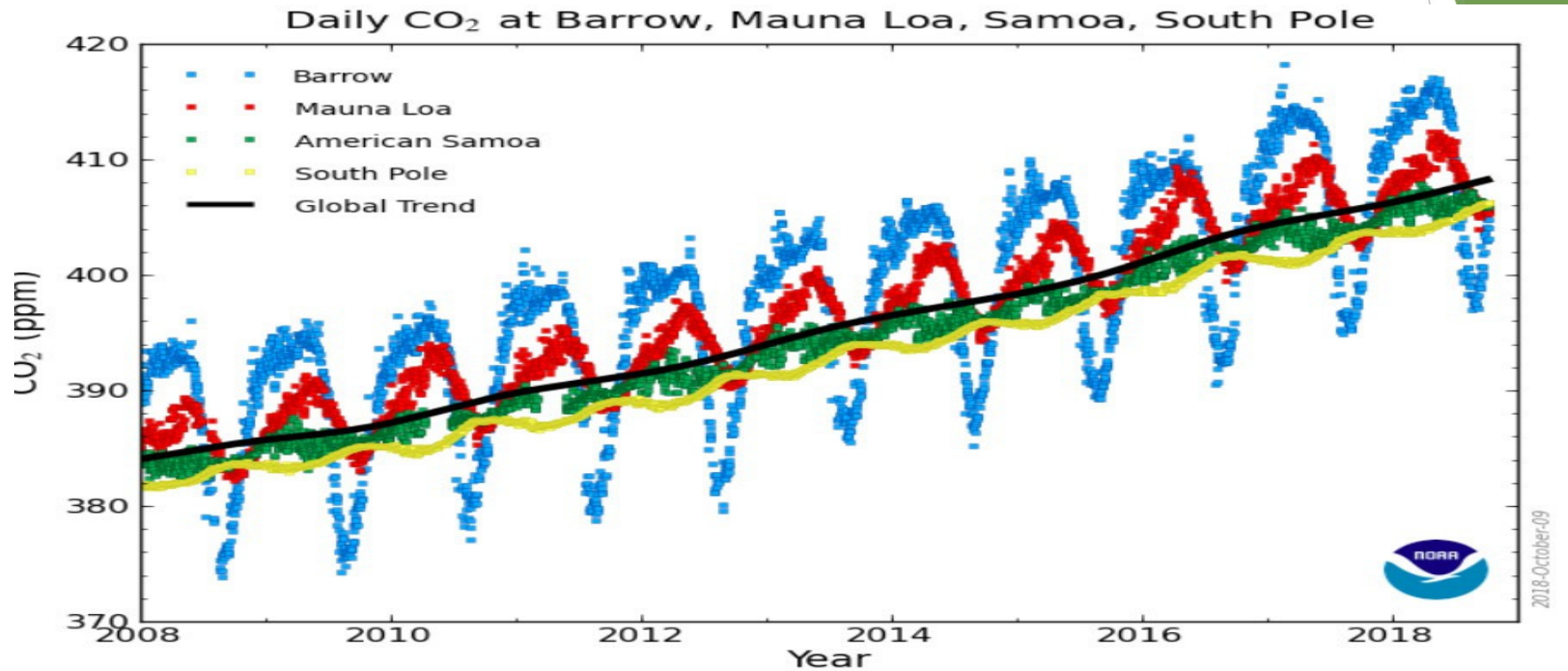
- ❖ CO₂ mixed by atmospheric winds.



❖ Courtesy Pieter Tans Mauna Loa

Mauna Loa harmonic trend

Strong (yellow line) at south pole



Photosynthesis issues

- ❖ City sprawl is 1 billion tons lost CO₂ consumption annually
- ❖ IPPC forestry estimates 2-3 billion tons lost CO₂ consumption annually from bio-mass burning.
- ❖ Deforestation of 30 million acers annually in Amazon Rain-forest is 90 million tons lost CO₂ consumption. Total of 60 billion tons lost since 1950.
- ❖ More than 300 billion tons lost CO₂ consumption annually from Amazon Rain-forest switching. 19x our emissions output.

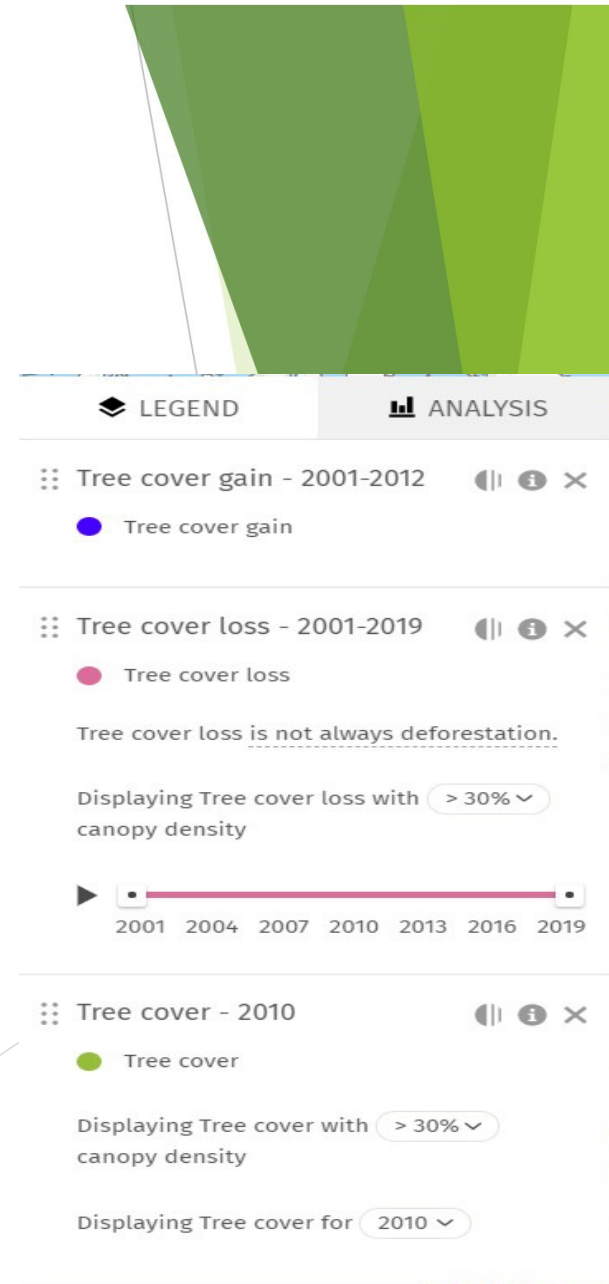
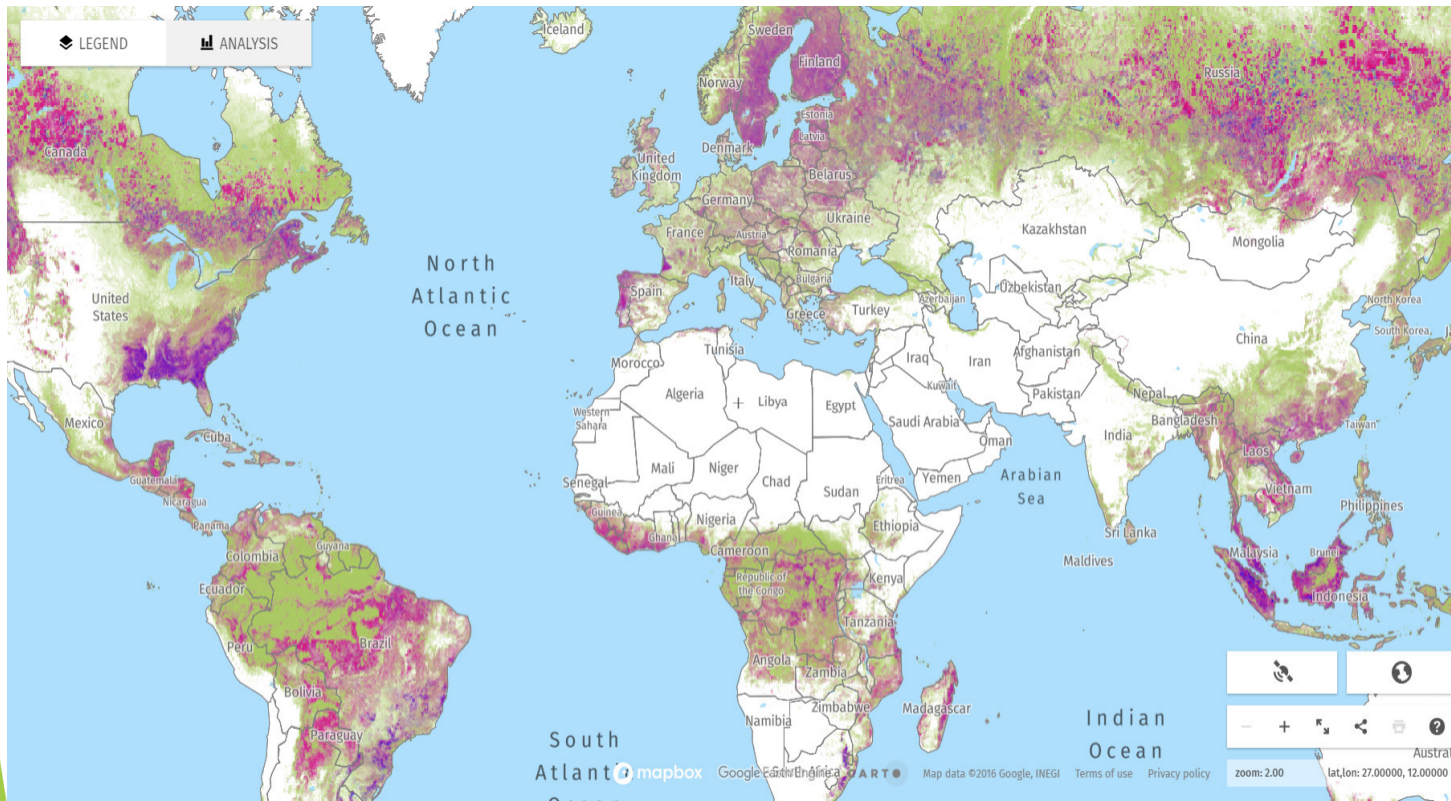
Essential Role of Photosynthesis in Defining Net Zero Carbon Dioxide Emissions for Equilibrium

- ❖ Northern Hemisphere forests consume only 2.6 gtyr^{-1} (2.6 billion tons per year) of carbon dioxide.
- ❖ All tropical forests in the Southern Hemisphere have switched to become oxygen consumers and carbon dioxide producers.
- ❖ We have a five-times increase in emissions of CO_2 mainly due to fossil fuel burning.
- ❖ We have a 97% decrease in photosynthesis consumption of carbon dioxide.
- ❖ The diffusion of CO_2 in the troposphere is toward the exosphere!

Photosynthesis issues

- ❖ The World Economic Forum has rightly said that we need to plant 1 trillion trees, which will—in just ten years--drain the atmosphere quickly by increasing the consumption of CO₂ (by 30 gt to 100 gtyr⁻¹).
- ❖ 35 billion tons of human emissions, 3 billion are deforestation issues. The switch over of the amazon to an oxygen sink and carbon dioxide producer is 15 billion tons of unaccounted for CO₂ annually.

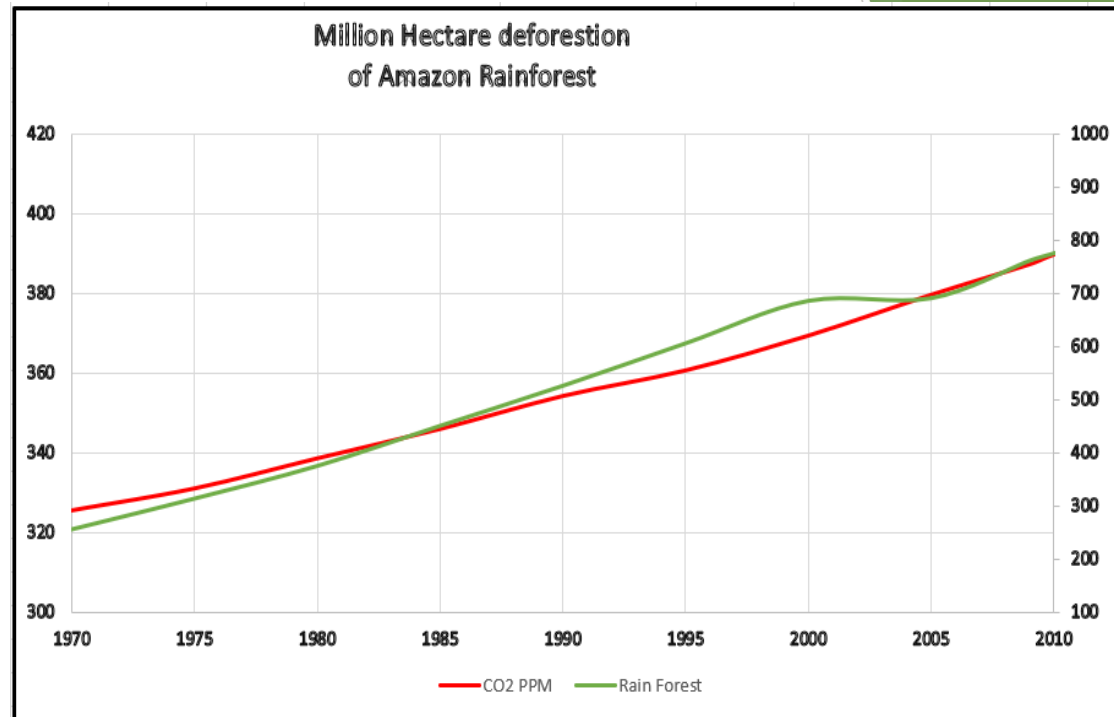
globalforestwatch.org/map



Amazon Rain-Forest

	x	-71.81	xbar	ybar	xi-xbar	yi-ybar	(xi-xbar)(yi-ybar)	(x-xbar)(x-xbar)	(y-ybar)(y-ybar)
year	CO ₂ PPM	-71.81	369.7831	622.3462					
1970	325	255.2			-44.7831	-367.146	16441.93445	2005.523979	134796.2983
1975	331.2	313.2			-38.5831	-309.146	11927.80983	1488.653825	95571.34444
1980	339	374.7			-30.7831	-247.646	7623.310604	947.5978249	61328.61751
1985	346.12	450.2			-23.6631	-172.146	4073.50768	559.9412095	29634.29828
1990	354.39	525.7			-15.3931	-96.6462	1487.68168	236.9468172	9340.479053
1995	360.82	605.7			-8.96308	-16.6462	149.2007574	80.33674793	277.0944379
2000	369.55	685.7			-0.23308	63.35385	-14.76631953	0.054324852	4013.709822
2005	379.8	690.7			10.01692	68.35385	684.6952189	100.3387479	4672.248284
2010	389.9	775.3			20.11692	152.9538	3076.960757	404.6905941	23394.87905
2014	398.6	831.7			28.81692	209.3538	6032.93368	830.4150556	43829.0329
2015	400.8	845.8			31.01692	223.4538	6930.850757	962.0495172	49931.62136
2016	404.2	860.8			34.41692	238.4538	8206.84768	1184.524594	56860.23675
2017	407.8	875.8			38.01692	253.4538	9635.535373	1445.28644	64238.85213
							76256.50215	10246.35968	577888.7123
					bottom	76949.7			
					top	76256.5		rsxy=	0.990991607

$$r_{xy}=0.99$$



- ❖ CO₂ Emissions correlation 363, Rain-forest photosynthesis lost 55 ppm.

Amazon Rain-forest

- ❖ 2 Billion acres deforested since 1950.
- ❖ **1950 start deforestation**
 - ❖ **1957 Atmospheric Carbon Dioxide started current increase 1970's trees and plants toppling over.**
- ❖ **Burning of bio-mass each acre causes minimum 1 billion CO₂ release annually (6 months). The massive release caused plants to grow to fast causing toppling and massive decay.**

Amazon Rain-forest

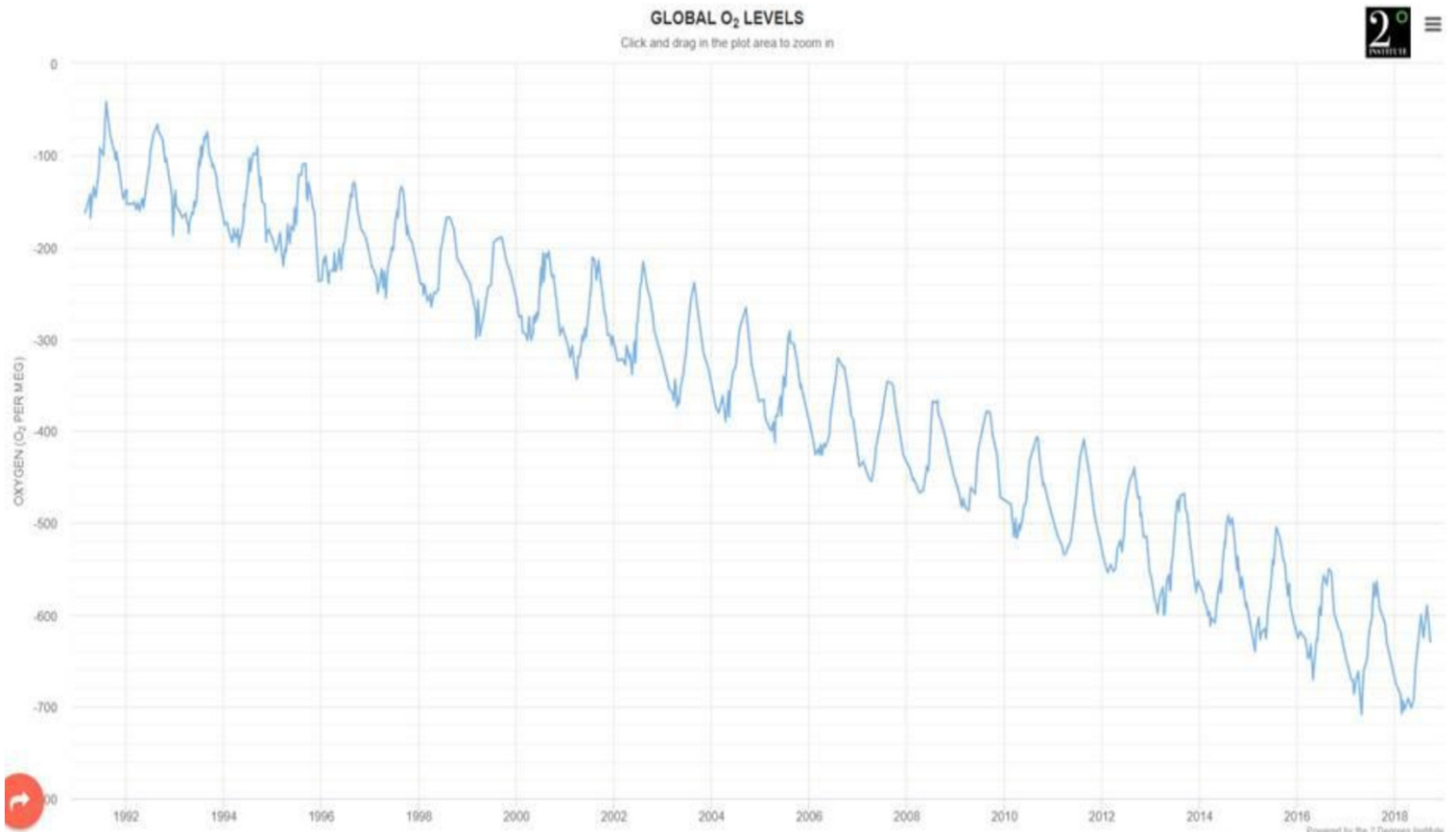
1990's Changeover to oxygen sink and carbon dioxide producer.

- ❖ Massive decay causing the rain-forest to change to an oxygen sink and carbon dioxide producer.
- ❖ One billion annual tons of carbon dioxide from biomass burning.
- ❖ 60 billion tons annual CO₂ consumption lost from deforestation.
- ❖ 300-400 billion tons annual CO₂ consumption loss from the switch over.
- ❖ 10-15 billion tons emissions from decay per annum
- ❖ **We have lost 20%+ of Earths Oxygen production.**



Loss of oxygen production worldwide

- ❖ The Amazon Rainforest deforestation is a 0.98 cause and effect to the reduction of oxygen since 1957.
- ❖ The oxygen loss cycles just like the carbon dioxide rise.



Correct solution for Atmospheric CO₂

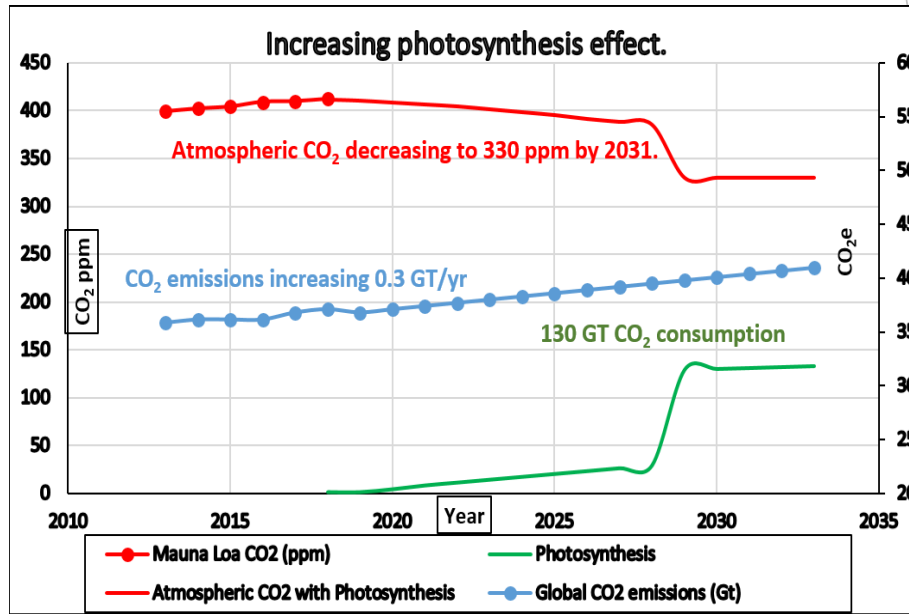
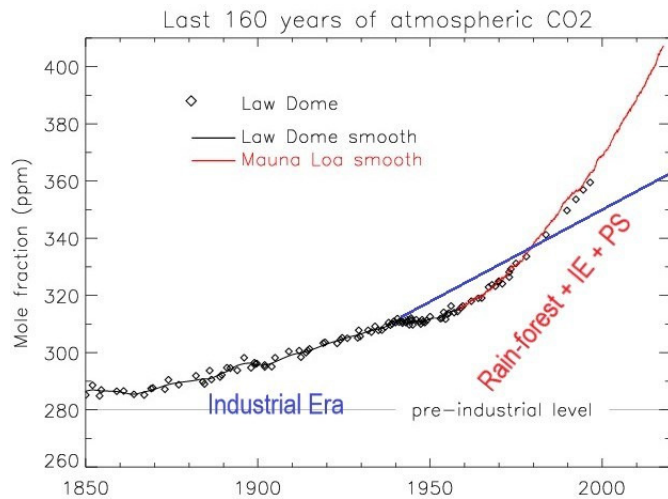
- ❖ Moratorium on Rain-forest deforestation starting now! All nations need to put pressure on Brazil and all south America to stop this. Not one more acre.
- ❖ Plant native trees and shrubs all over the world. 12 billion new in 2019-2021. Increase Photosynthesis.
- ❖ Stop deforestation in India and everywhere which is not sustainable.

Planting Ideas

- ❖ Provide space where public can come and plant trees and shrubs. All government-owned lands. Very small cost. Need website with document for each planting area.
- ❖ Plant shrubs in all freeway medians and sides. This is revenue plus. Plant
 - ❖ native shrubs at a minimal spacing so all light is used in photosynthesis. This will take in 1 ton of CO₂ emissions per acre per year right at the source. The space would not need to be mowed every week in the summer.
- ❖ Get schools involved and planting massive number of trees and shrubs. In
 - ❖ their property and the government property as in 1 above.
- ❖ Parks can add trees and shrubs.
- ❖ Tax incentive for business to plant trees and shrubs. Flat roofs which can structurally handle dirt can plant shrubs at minimum spacing and water using drip irrigation.
- ❖ Wild fire attention. Get a retainer for the Jet plane and use it from the start
 - ❖ on any wild fire.
- ❖ This all government policy document is on the home page of cctruth.org

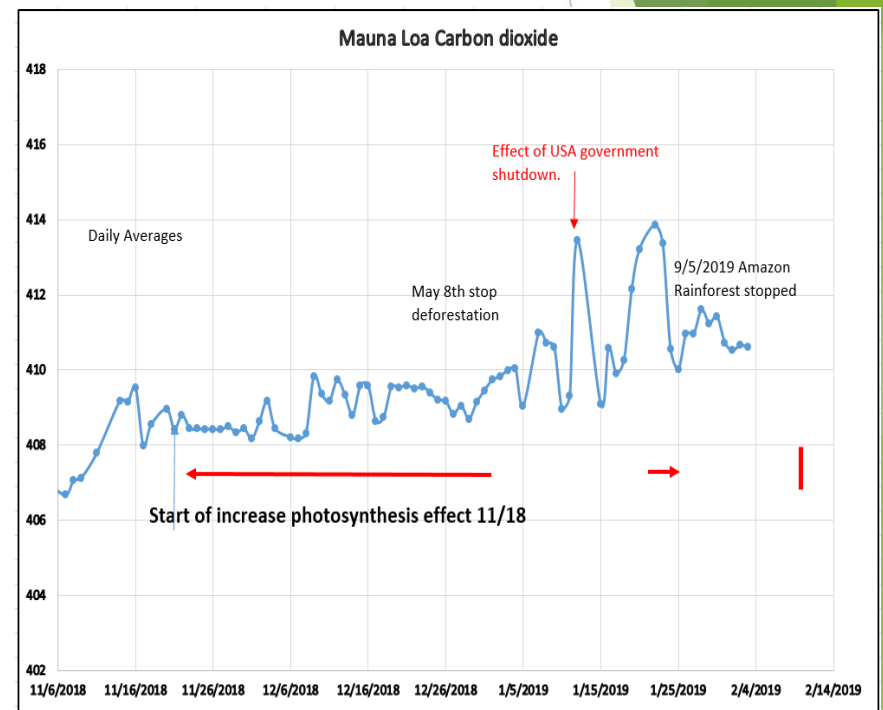
New Paradigm

- ❖ We have worked on Carbon Dioxide Emissions.
- ❖ Lets work on Photosynthesis. Atmospheric CO₂ decrease by 2031.
- ❖ Drain atmospheric CO₂ like a bathtub.



Results

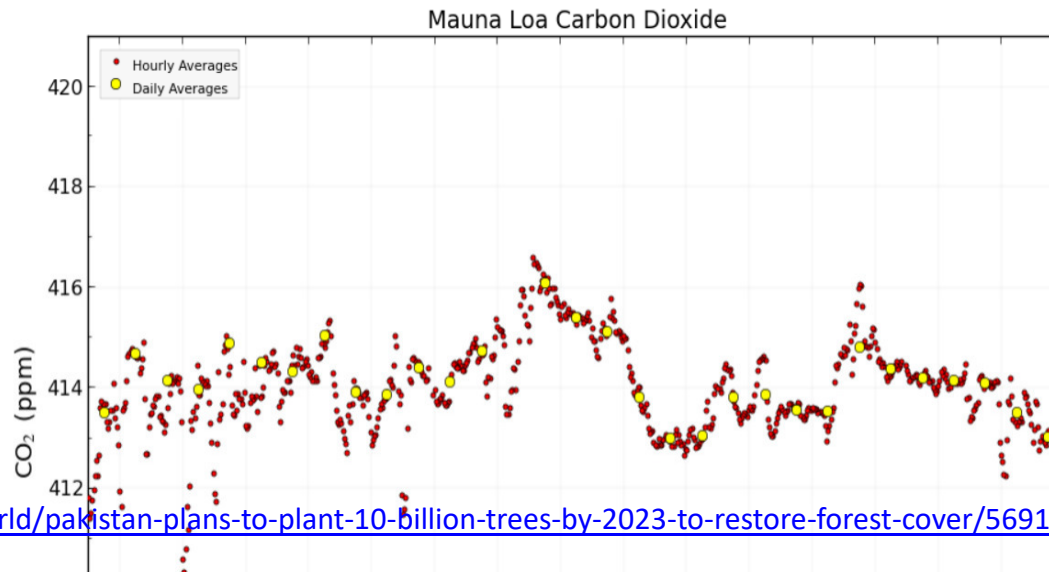
- With more than 1 billion trees planted and Indian Rain forest stopped deforestation.
- Atmospheric CO₂ went “flat” for the first time!
- Period of 1 month December 2019
- This year more than 12 billion trees and one rainforest stopped. Expect similar or longer flat period. Also this year minimum was Lower than normal (407.75-408.25)



Mauna Loa 2020

Recent Daily Average Mauna Loa CO₂

February 26: 413.02 ppm
February 25: 413.50 ppm
February 24: 414.09 ppm
February 23: 414.13 ppm
February 22: 414.18 ppm
Last Updated: February 27, 2020



<https://theprint.in/world/pakistan-plans-to-plant-10-billion-trees-by-2023-to-restore-forest-cover/569129/>

<https://www.cbsnews.com/news/climate-change-india-plants-220-million-trees-in-a-single-day-to-save-the-planet/>

<https://www.abc.net.au/news/2019-10-17/green-walls-in-china-and-africa-keeping-deserts-at-bay/11602796> 80 billion trees planned!

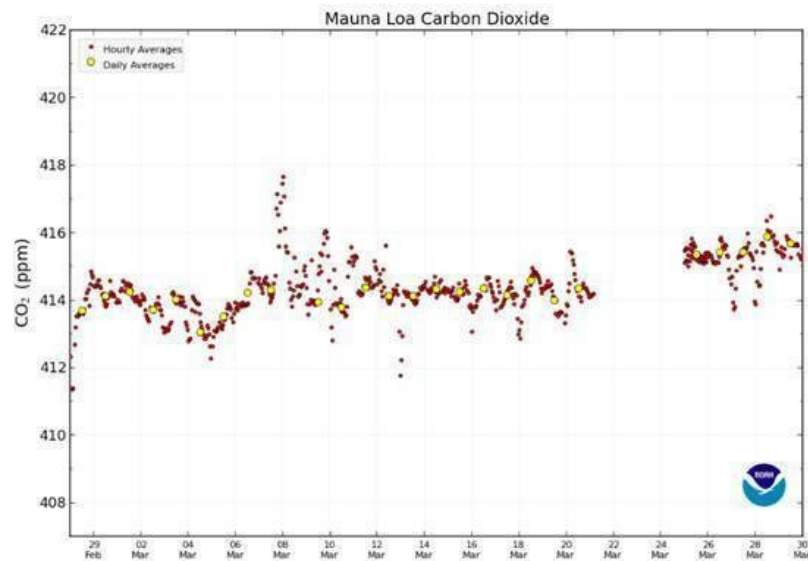
<https://www.aljazeera.com/videos/2020/1/23/world-economic-forum-leaders-pledge-to-plant-1-trillion-trees>

Mauna Loa fraud

- ❖ The Department of Commerce Office of Inspector General (OIG) has received your correspondence and reviewed the information you provided. We have assigned complaint number 20-0641.

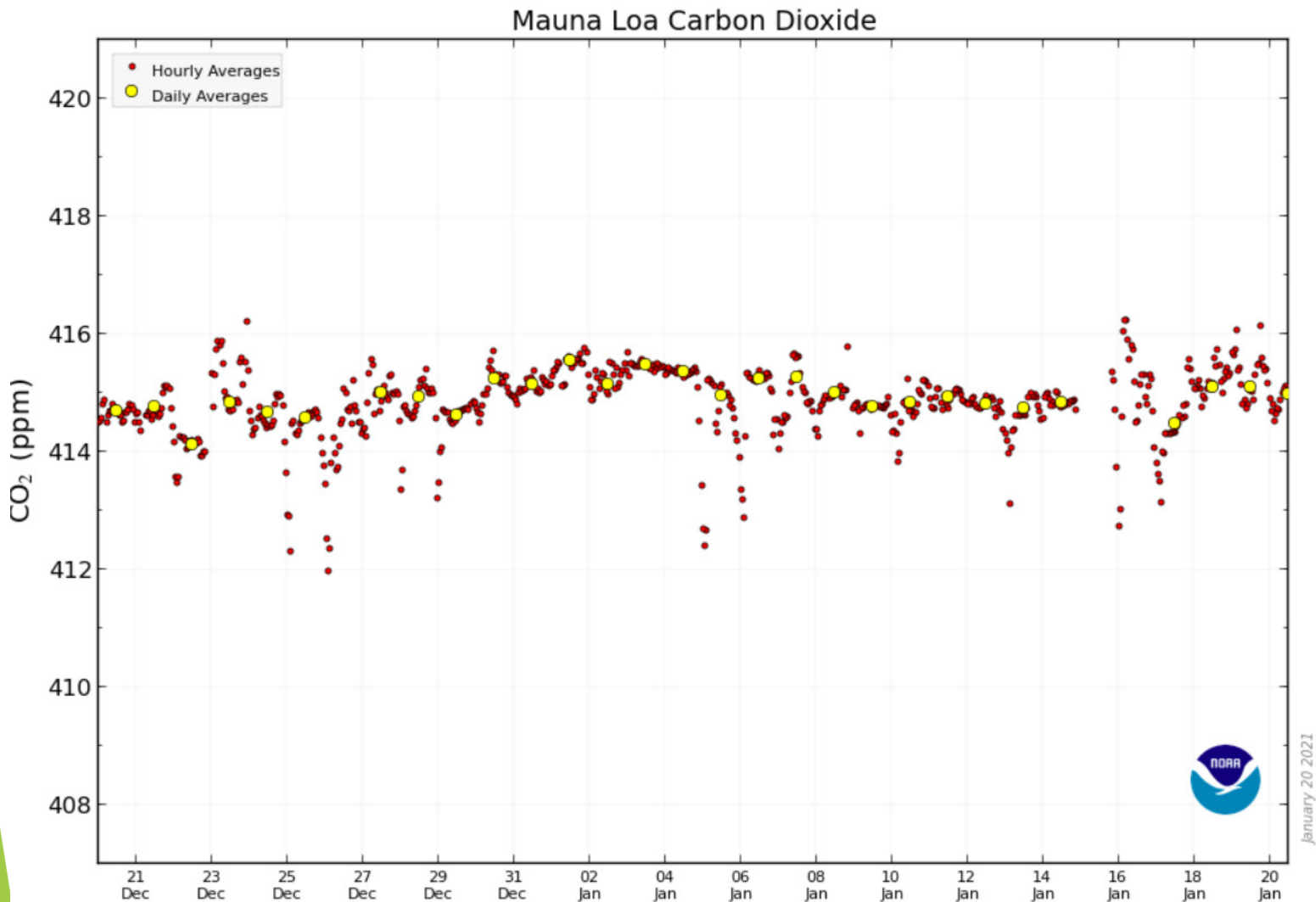
Recent Daily Average Mauna Loa CO₂

March 29: 415.68 ppm
March 28: 415.89 ppm
March 27: 415.43 ppm
March 26: 415.43 ppm
March 25: 415.34 ppm
Last Updated: March 26, 2020



After the analyzer was “fixed” NOAA Mauna Loa CO₂ data Increased by exactly 1.5ppm

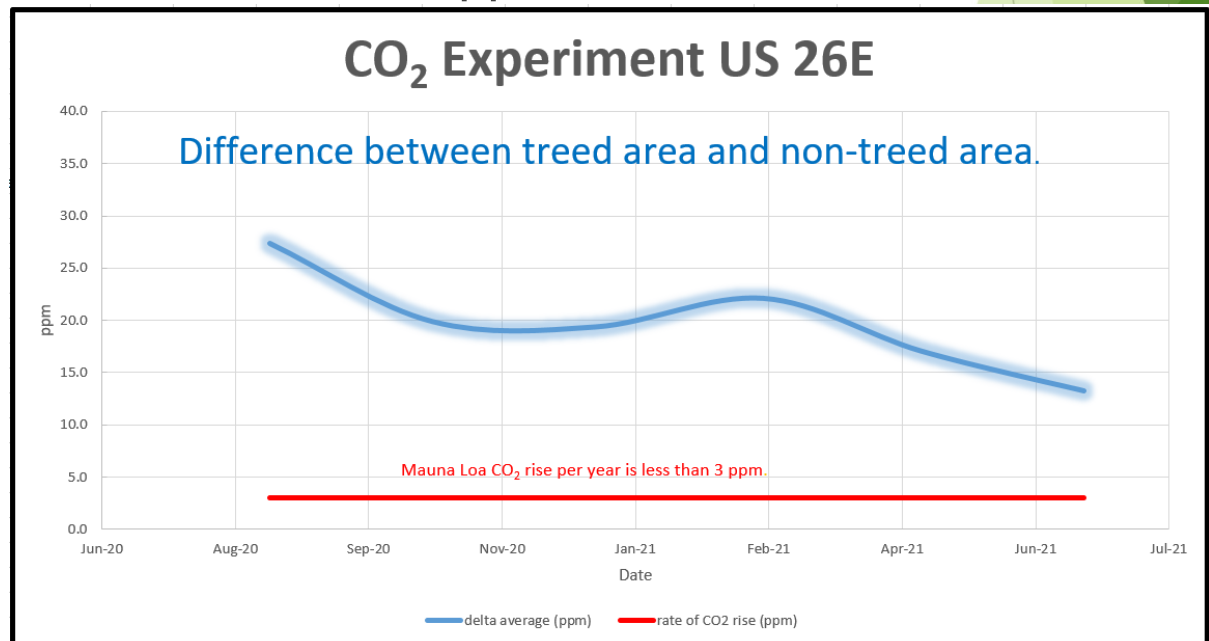
Peru Stopped Deforestation in December



State of Oregon sanctioned experiment



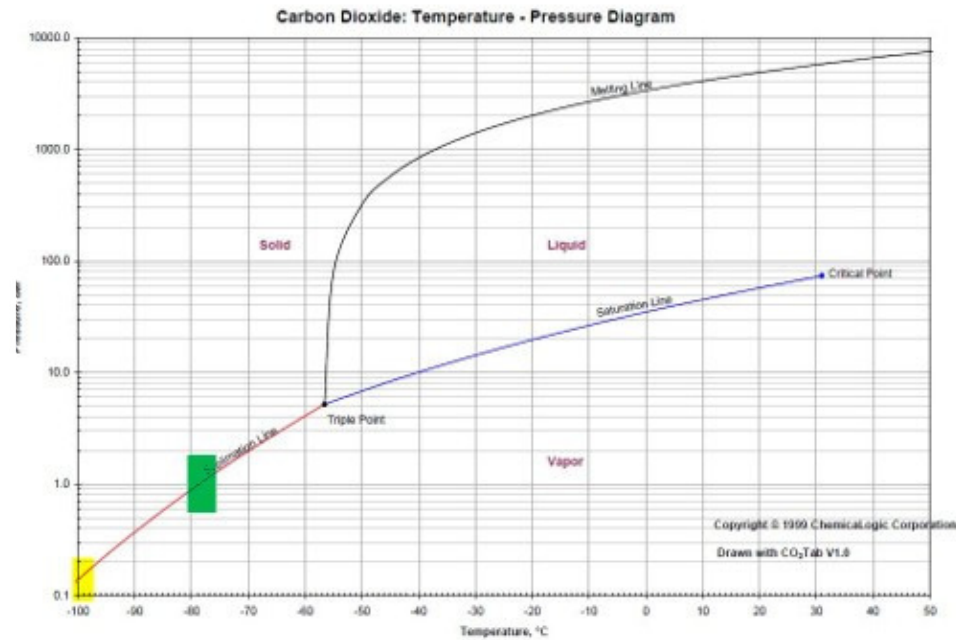
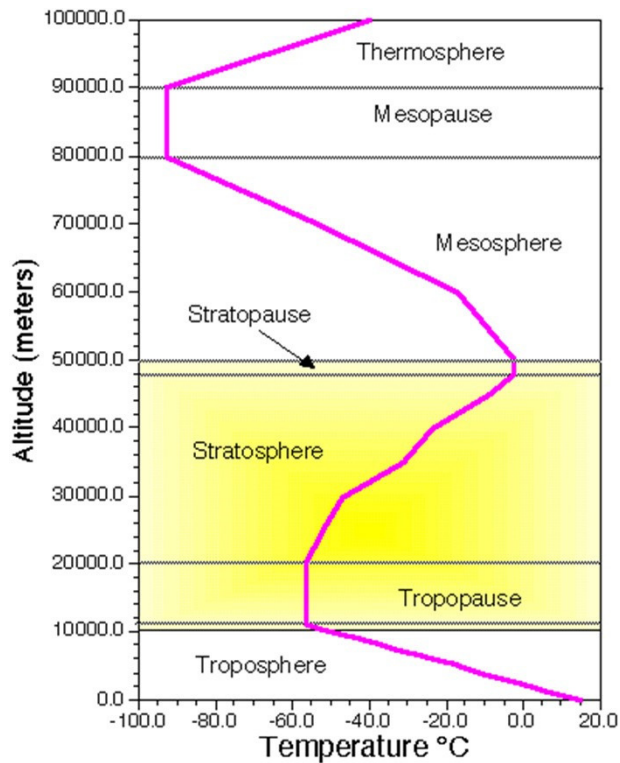
- ❖ Non treed area - treed area is 28 ppm lower carbon dioxide concentration! 15 ppm difference in December!
- ❖ NIST Certified CO₂ sensors calibrated within 1 ppm.
- ❖ 160000 autos per day.



Tweet to Amazon leaders

- ❖ @jairbolsonaro @MartinVizcarraC @alvorada_palace, @MichelTemer @Peru @IvanDuque @evoespueblo @MashiRafael @MOTPGuyana @govsuriname @maduro_en @Lenin
- ❖ Stop Deforestation NOW! Peru stopped last December!
<https://riotimesonline.com/brazil-news/rio-politics/stop-amazon-rainforest-deforestation-sponsored/>
- ❖ <https://cctruth.org/rainforest-stop.pdf>
- ❖ On Facebook connect to Climate Change Truth and watch and share the posts.

CO₂ does not freeze in Mesosphere



❖ Pressure in Mesosphere is 1mb (1 millibar)

Intergovernmental Panel on Climate Change

- ❖ The Intergovernmental Panel on Climate Change reports are inaccurate and are falsely skewing Data. <https://cctruth.org/ipcc.pdf> Publishing garbage manuscripts in a journal whose chief editor that has a degree in Political Science. Is not science.

Review of:

- ❖ SR 1.5 Chapter two “Mitigation” garbage
 - ❖ Atmospheric CO2 equilibrium statement had zero references to any published manuscript.
 - ❖ The actual equilibrium is 8.6 gt/yr.
 - ❖ Their only probability for their solution to work by lowering emissions of CO2 is 50-66%. Would you take your car to a mechanic who said they could fix it 50-66% of the time?
- ❖ <http://www.theenergynet.com/2020/06/one-mans-fight-to-end-deforestation-one-tree-at-a-time/>

Intergovernmental Panel on Climate Change

Limiting warming to 1.5°C depends on greenhouse gas (GHG) emissions over the next decades, where lower GHG emissions in 2030 lead to a higher chance of keeping peak warming to 1.5°C (high confidence). Available pathways that aim for no or limited (less than 0.1°C) overshoot of 1.5°C keep GHG emissions in 2030 to 25-30 GtCO₂e yr⁻¹ in 2030 (interquartile range). This contrasts with median estimates for current unconditional NDCs of 52-58 GtCO₂e yr⁻¹ in 2030. Pathways that aim for limiting warming to 1.5°C by 2100 after a temporary temperature overshoot rely on large-scale deployment of carbon dioxide removal (CDR) measures, which are uncertain and entail clear risks. In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO₂ emissions decline by about 45% from 2010 levels by 2030 (40-60% interquartile range), reaching net zero around 2050 (2045-2055 interquartile range).

For limiting global warming to below 2°C with at least 66% probability CO₂ emissions are projected to decline by about 25% by 2030 in most pathways (10-30% interquartile range) and reach net zero around 2070 (2065-2080 interquartile range). {2.2, 2.3.3, 2.3.5, 2.5.3, Cross-Chapter Boxes 6 in Chapter 3 and 9 in Chapter 4, 4.3.7}

Intergovernmental Panel on Climate Change

- ❖ Working Group I Second Order Draft for Ar6
 - ❖ The scientific consensus is 33% not 97%
 - ❖ IPCC GWP (Global warming potential) is false because it assumes equal concentrations of GHG. CO₂ is 419 ppm CH₄ is 1.9 ppm and so on.
 - ❖ Sea level rise is 1.4 mm/yr and not accelerating. The Jakobshavn Glacier in Greenland has grown for the third year in a row.
 - ❖ Residence time. In a 2003 report, the IPCC said it was from 5-200 years. Average residence time is 150 years.

Intergovernmental Panel on Climate Change

❖ Working Group III First Order Draft for Ar6

- ❖ Netflix watch “Kiss the ground” movie explains even if we stopped all CO₂ emissions atmospheric CO₂ will not lower.
- ❖ Use of Unscientific Terms. The document uses the unscientific terms highly (or otherwise) likely six times, unlikely three times, and highly (or otherwise) confident sixty-two times.
- ❖ The graph they use to say cause and effect for emissions vs. CO₂ rise has not been updated since 2012. After 2014 worldwide emissions were mostly flat, with a 7% drop last year.

Global Warming Potential

- ❖ IPCC Global warming potential is a false calculation!
 - ❖ Assumes equal GHG concentrations. Not based in reality!
- ❖ Dr. T. J. Blasing of Oak Ridge National Laboratory exposed greenhouse gasses to long wave radiation.

Gas (Watts/ m ²)	Increased radiative forcing
---------------------------------	-----------------------------

❖ CO ₂ ppm.	1.94
❖ CH ₄ Methane ppb.	0.50
❖ O ₃ (Ozone)	0.40
❖ N ₂ O Nitrous Oxide ppb	0.20

- ❖ The remainder are negligible.
- ❖ https://cdiac.ess-dive.lbl.gov/pns/current_ghg.html?fbclid=IwAR1u1m3z1xjRUebekpHruu5gXnaZ0CTicuG0gGcgw1Ph855sbZ41A5tcg7E

Sea-Level Rise

❖ Tide Gauges & Satellites

- ❖ Different Linear Measures Inconsistent Results
- ❖ Apparently Unaffected by Recent CO₂ Increases

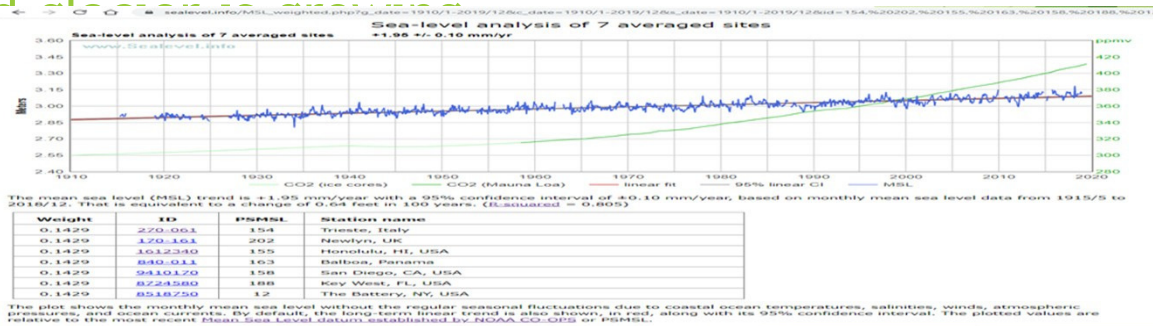
The Future for NYC?



II-Ocean Sea level rise is linear and not accelerating!

- ❖ No reliability in NOAA Sea level measurement's
- ❖ The NOAA satellite; Jason-3 has a minimum resolution of 25 mm.
- ❖ This is like using a yardstick with no gradations and putting an unfamiliar object 20 feet away and then performing measurement's. The data would not be reliable.
- ❖ The Jakobshavn Glacier in Greenland has grown for the third year in row.

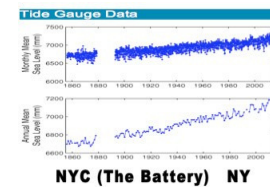
<https://earthobservatory.nasa.gov/images/145185/major-greenland>



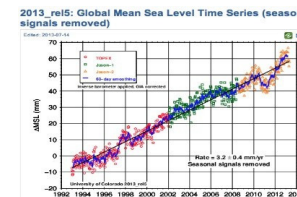
World Sea-Level rise

❖ 3 Sources - Different Metrics

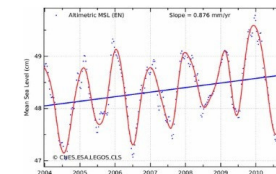
Tide Gauges 1.4mm/yr. Linear



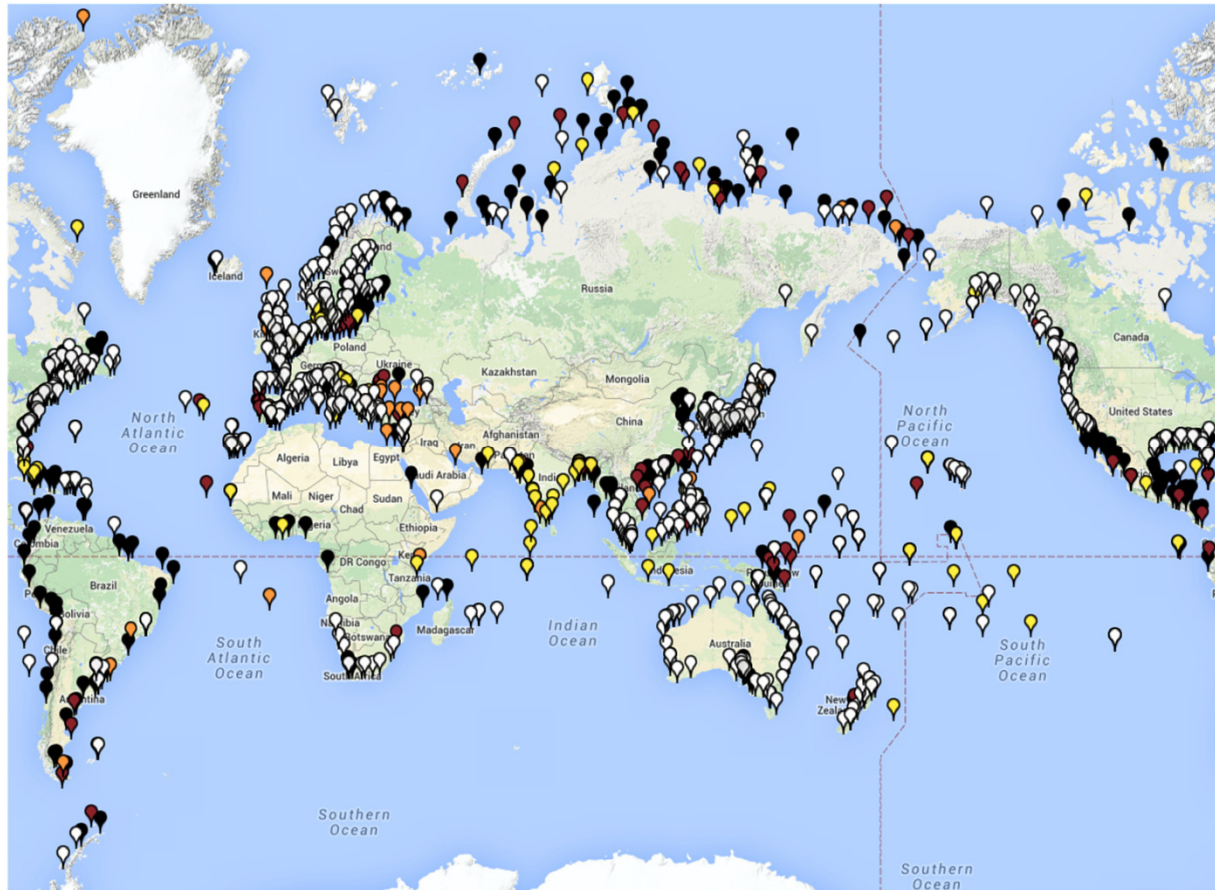
Topex/Poseidon/ Jason 1 - 3 3.3mm/yr. Linear



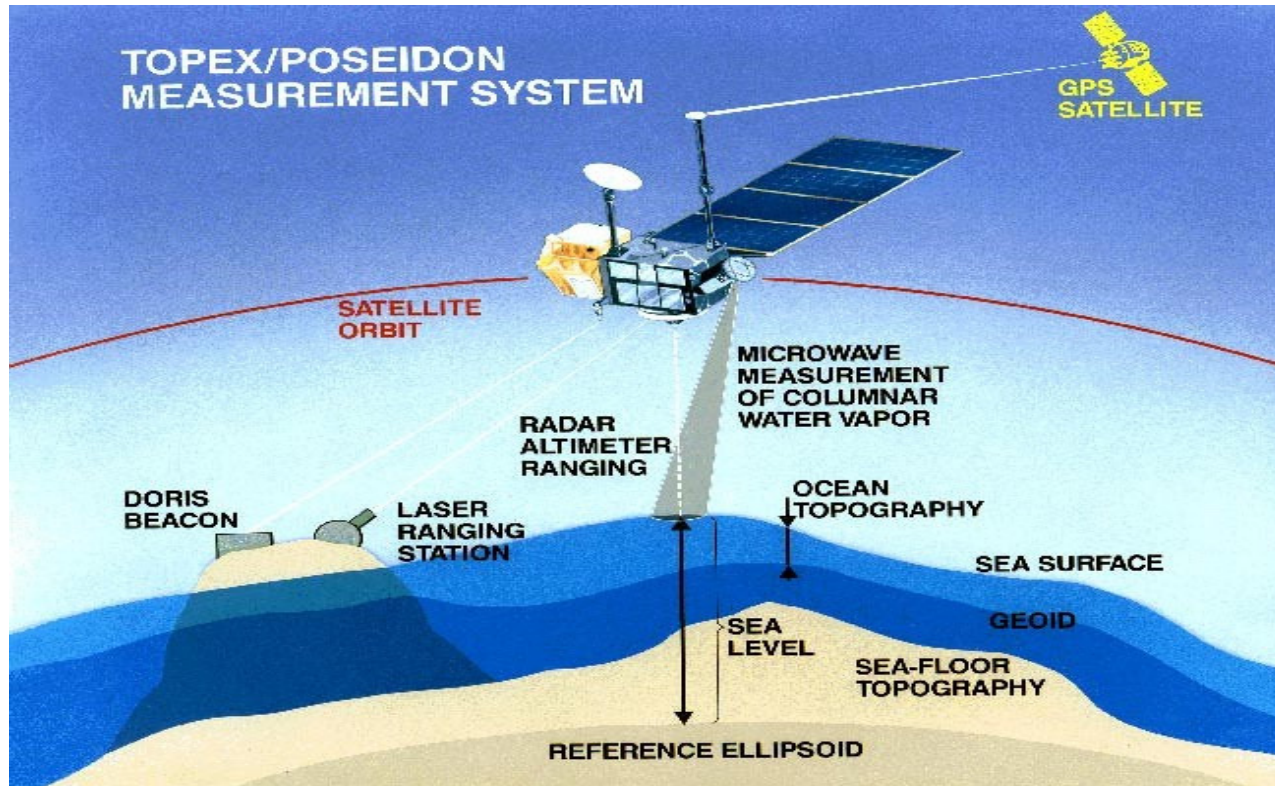
ENVISAT 0.5 - 2.5mm/yr. Linear



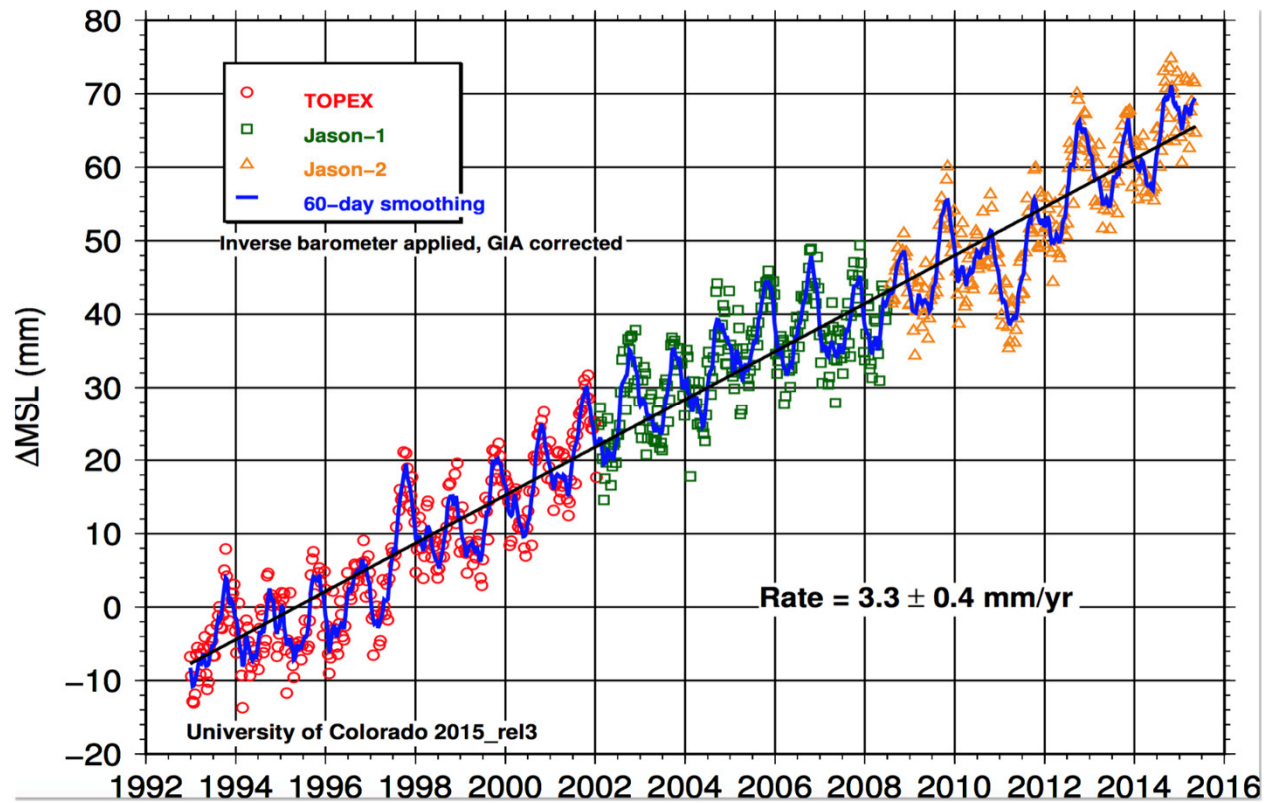
Tide Gauge Distribution



Satellite Systems



Satellite [Adjusted]



Topex/Poseidon Specifications

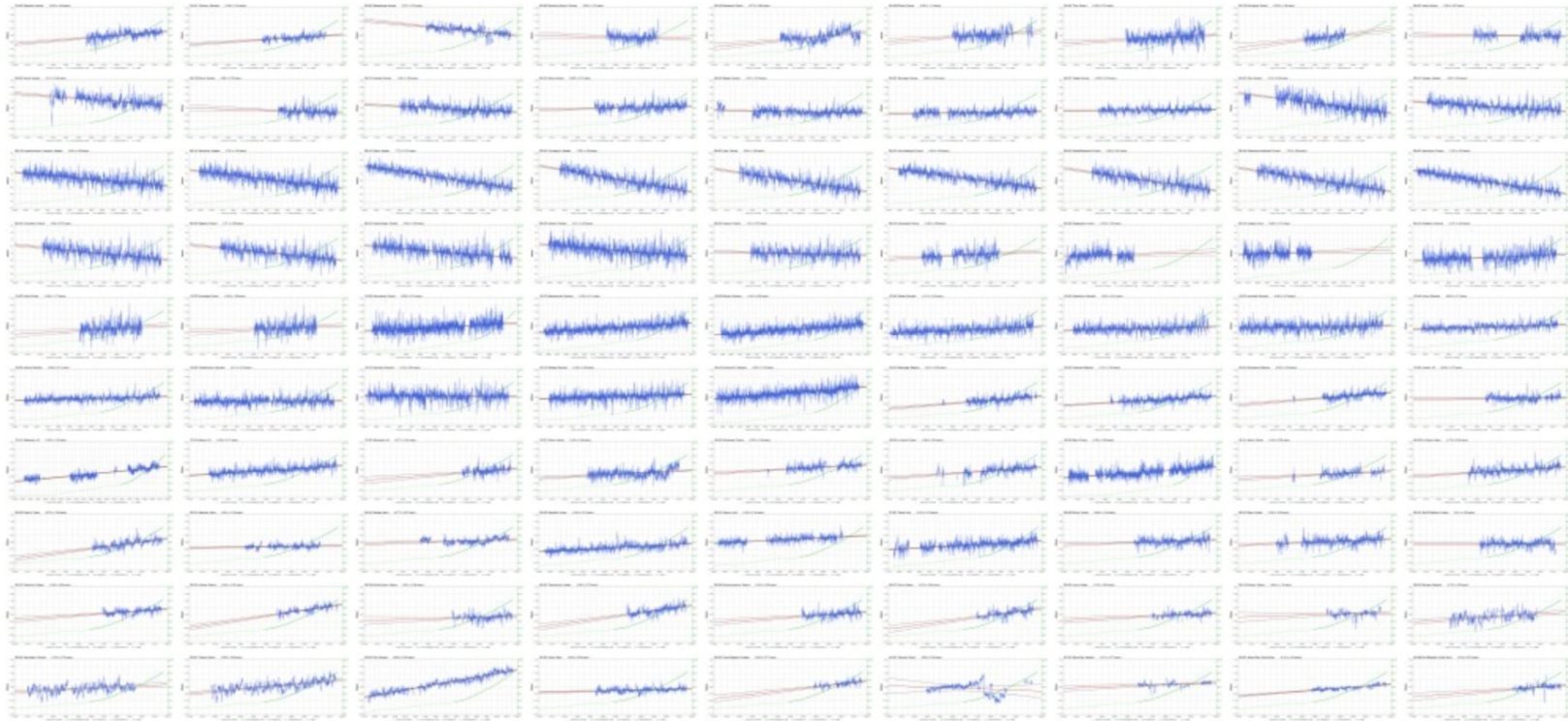
❖ Altitude 1335KM [830 Mi]
Radar Resolution

Ku-Band	13.65 GHz	23 mm wavelength
C-Band	5.3 GHz	56 mm wavelength
Orbital Tracking Error		20 - 40 mm

Massive 38% CO₂ Increase Since 1880

- Any sign of Sea-Level Rise Acceleration?
- They're all Linear

NOAA's 2016 list of 375 long term trend tide stations



Summary

- ❖ Atmospheric CO₂
 - ❖ Not caused by carbon dioxide emissions. Little effect.
 - ❖ Caused by massive loss of photosynthesis. Mainly Amazon Rain-forest. Trees release Terpenes which induce rain!
 - ❖ Does not freeze in upper atmosphere.
 - ❖ Sea Level rise is not accelerating.
 - ❖ Contact Data
 - ❖ research@cctruth.org 503-995-1231

Acknowledgments

- ❖ International Journal of Chemical Engineering
- ❖ International Journal of Environmental Science and Development
- ❖ This conference
- ❖ Your kind attention