Polar Equilibrium

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University of Chongqing, CQ China

Charl E Janeke (PE), Los Angeles, California, USA

www.polarequilibrium.com

Polar Equilibrium

An Interactive Analysis of the Controlling Global Thermal Forces

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1. The most compelling question confronting modern society is sustaining the global environment in its present form.

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2. The rapid retraction of the polar ice caps, glaciers fields & global snow depositories, the destruction of the Amazon rain forests, expanding deserts & persistent continental droughts raised the scepter of universal demise.

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3. With carbon dioxide (CO2) to blame for the impending global (greenhouse) demise, the pertinent question is whether CO2 is the driving denominator OR whether CO2 is simply an indicator of much more powerful forces at work.

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4. Although the combustion of fossil fuels & destruction of the Amazon forests have increased the atmospheric carbon dioxide concentration to a 400,000 year peak, the earth & the associated environment must be seen as a slice in an evolutionary process.

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5. In order to answer the question as to the driving forces & perceived events, a global heat balance model has been devised as to the interaction of fossil fuel combustion, solar heat gain, radiation loss into deep space, the polar ice caps & carbon depositories of the world.

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6. A 2nd (crust formation) model has been devised to demonstrate the rate of chilling at the formation of the earth. Common emissivity/absorptivity's of 0.4 & 0.8 has been demonstrated in synergy with the heat balance & crust formation models.

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7. It is being attested that CO2 particulate is not a material factor as to thermal blanketing OR emissitvity/absorptivity conversely as the power of radiation into deep space is 4th power driven (the Boltzman rule).

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8. Rational interaction between the GLOBAL combustion of hydrocarbon fuel & the depletion of the (polar) ice reserves (approx 50%) has conversely been demonstrated via the (global) equilibrium model.

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9. Rapid chilling of the earth has been demonstrated via the crust formation model. The 1st harmonic of formation (©)(a refractive inversion gradient) transpired 3.5-4Byears after formation that fractured the mantle of the earth resulting in continental drift.

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FRACTIONAL VARIANCE					***GLOBAL VARIANCE***			
Surface temperature change					*Radiation rate into deep space*			
#	**T-Abs**	**Tr^4**	**%Ra**		**#**	**T-Abs**	**Tr**	**Tr^4**
1	500	1	0		*1*	6500	13.0	3,088,050
2	501	1.008	0.8		*2*	5500	11.0	1,582,950
3	502	1.016	1.6		*3*	4500	9.0	709,300
4	503	1.024	2.4		*4*	3500	7.0	259,500
5	504	1.032	3.2		*5*	2500	5.0	67,470
6	505	1.041	4.1		*6*	1500	3.0	8,650
7	506	1.049	4.9		*7*	1000	2.0	1,622
8	507	1.057	5.7		*8*	800	1.6	600
9	508	1.066	6.6		*9*	600	1.2	116
10	509	1.074	7.4		*10*	500	1.0	0

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	GLOBAL EQUILIBRIUM INVERSION (loss/gain tabulation)						
#	T-Abs	Gross rad	E	Heat loss	Solar rad	A	Heat gain
1	6500	-16984870	0.4	-6793948	282	0.8	226
2	5500	-8706820	0.4	-3482728	282	0.8	226
3	4500	-3901745	0.4	-1560698	282	0.8	226
4	3500	-1427845	0.4	-571138	282	0.8	226
5	2500	-371680	0.4	-148672	282	0.8	226
6	1500	-48170	0.4	-19268	282	0.8	226
7	1000	-9515	0.4	-3806	282	0.8	226
8	800	-3897	0.4	-1559	282	0.8	226
9	600	-1233	0.4	-493	282	0.8	226
10	500	-595	0.4	-238	282	0.8	226
	E-Area	5.5E+15	ED	33000000	ft	ER	3.3E+17

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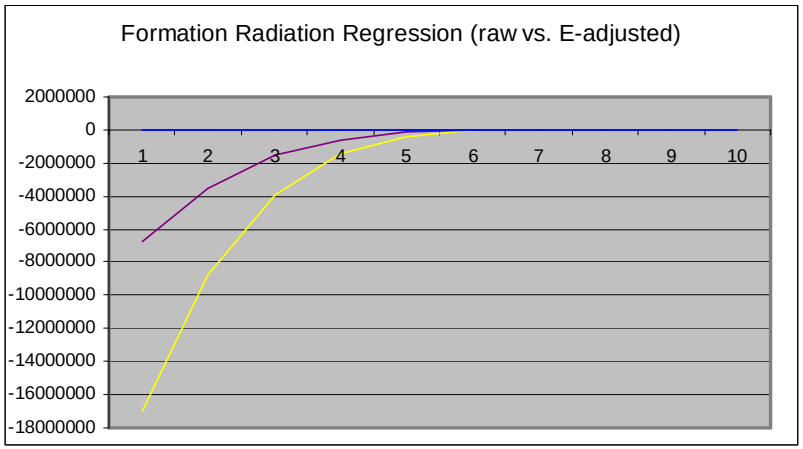

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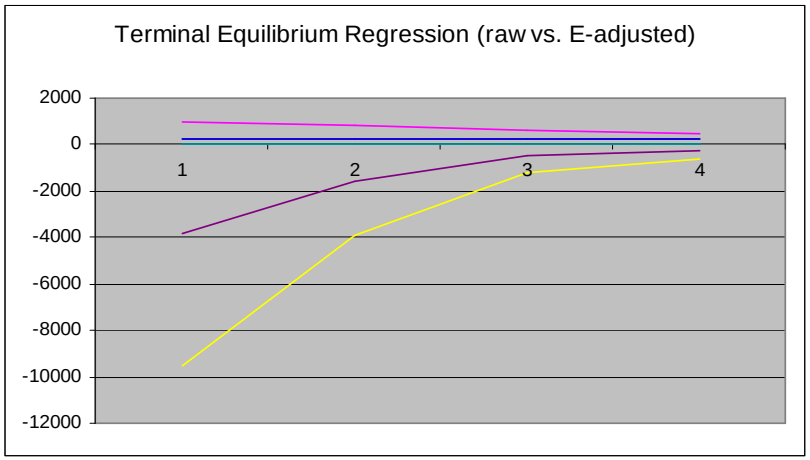

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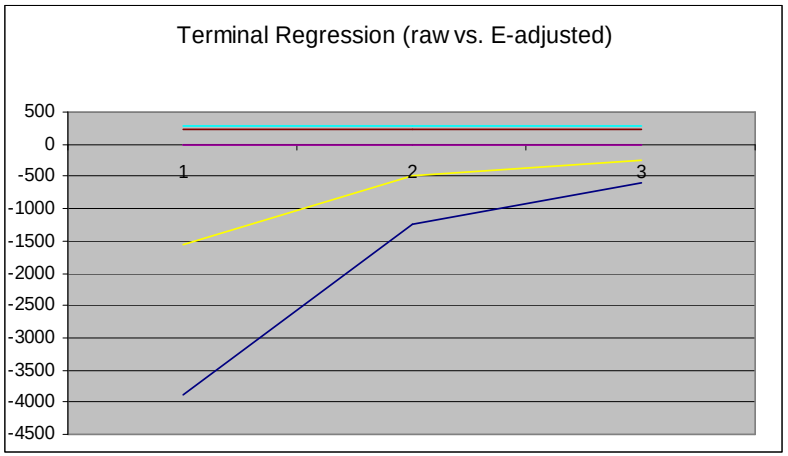

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10. Clear skies that spawned precipitation, rivers, rain forests, snowcaps, glaciers & the polar ice caps manifested some 2B-years after formation (eg 3.5B years BC) when the surface temperature of the earth dropped below 200F.

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11. Rapid radiation loss, depletion of the incipient CO2 atmosphere & loss of core heat due to an ever increasing mantle depth, resulted in the onset of the 1st Ice Age 1B years ago as an inevitable consequence of thermal regression.

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12. In order to complete the heat balance loop, it is necessary to develop a global impact model of human activity in terms of rate of combustion of the hydrocarbon resources vs. destruction of the carbon heritage of the earth.

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13. In accordance with Table #2 human activity will result in a 5% depletion in the global ice reserves by 2100, with a corresponding 7F increase in the mean global atmospheric temperature.

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14. Notwithstanding its origin of a boiling plasma pot 4.5B years ago, the world chilled rapidly due to the powerful black-bulb radiation force that is T^4 driven with consequential chilling to approx 55F 1B years ago.

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15. Although we are perceiving an immense meltdown phenomenon, the global impact is ***de minimus*** due to (1) the immense extent of (Polar) ice deposits & (2) the world is becoming chilled-out. Preserving the carbon heritage however rank #1.

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16. The message hence is that although we are living in the realm of global harmonics with a cycle of 40-100,000 years, we cannot take for granted that a "spinning magna" (alone) would preserve human life via the cloak of an electromagnetic shield.

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17. *Equilibrium Thresholds;*

.Carbon content of the Amazon basin
.Carbon content of global forests generally
.Combustion of fossil fuels as to CO2 emission
.Combustion of fossil fuels as to thermal pollution
.Latent heat content of the polar ice caps
.Solar incidence vs. deep space radiation
.Temperature of the magna at formation
.Continental drift/reformation.

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18. *Global Quanta;*

.Spherical area of the earth
.Plan/projection area of the earth
.Mass/weight of the atmosphere as is
.Production of coal/oil & natural gas
.Carbon dioxide (CO2) emission rates
.Polar ice mass/weight & trends thereto
.Carbon content of the Amazon/rain forests
.Global forestry carbon content & trends thereto.

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PERIOD	UNITS	1900	1920	1940	1960	1980	1990	2000	2010	2020	2040	2060	2080	2100
Mult-factor	xx	10	10	10	10	10	10	10	10	20	20	20	20	20
A Carbon production;														
1 Global Oil	B-BAR/y	0.00	0.80	2.00	20.00	20.00	25.00	30.00	25.00	20.00	18.00	9.00	2.50	2.00
2 Global Oil	BTOilEq	0.00	0.12	0.30	3.00	3.00	3.75	4.50	3.75	3.00	2.70	1.35	0.38	0.30
3 Global Coal	BTOilEq	0.40	0.60	0.80	1.30	1.80	2.20	2.20	2.50	**3.70**	**3.80**	**3.70**	**2.25**	**1.75**
4 Global Gas	BTOilEq	0.00	0.10	0.20	0.40	1.20	1.70	2.20	2.50	**3.10**	**3.50**	**3.80**	**3.90**	**4.00**
5 CARBGross	BTOilEq	0.40	0.82	1.30	4.70	6.00	7.65	8.90	8.75	9.80	10.00	8.85	6.53	6.05
6 CARBHeat	MBBtu/y	14	30	47	169	216	275	320	315	353	360	319	235	218
7 CARBCO2	BTon/y	1.5	3.1	5.0	17.9	22.9	29.2	33.9	33.4	37.4	38.1	33.8	24.9	23.1
B Particle balance;														
1 CARBPart	ppm	0.34	0.70	1.11	4.00	5.10	6.50	7.57	7.44	8.33	8.50	7.52	5.55	5.14
2 AMZCO2-	ppm	2.00	1.95	1.90	1.85	1.80	1.75	1.70	1.65	1.60	1.55	1.50	1.45	1.40
3 RESCO2-	ppm	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	0.90	0.80
4 GBLC02-	ppm	4.00	3.85	3.70	3.55	3.40	3.25	3.10	2.95	2.80	2.65	2.50	2.35	2.20
5 REFCO2	ppm	200	168	143	147	164	196	241	286	397	514	614	678	737
C Rad heat balance;														
1 ERTRad-E	NIL	**0.4**	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
2 SOLRad-E	NIL	**0.8**	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
3 Etemp-m	Renkin	**500**	500	500	500	500	500	500	500	500	500	500	500	500
4 ERadLoss	Btu/SF	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
5 ERadLoss	MBBtu/h	242	242	242	242	242	242	242	242	242	242	242	242	242
6 SolRadIN	Btu/SF	240	240	240	240	240	240	240	240	240	240	240	240	240
7 SolRadIN	MBBtu/h	336	336	336	336	336	336	336	336	336	336	336	336	336
8 GainRad	MBBtu/h	94	94	94	94	94	94	94	94	94	94	94	94	94
9 **ICEFACT%**	**50**	**100**	99.7	99.4	99.1	98.8	98.5	98.2	97.9	97.3	96.7	96.1	95.5	94.9

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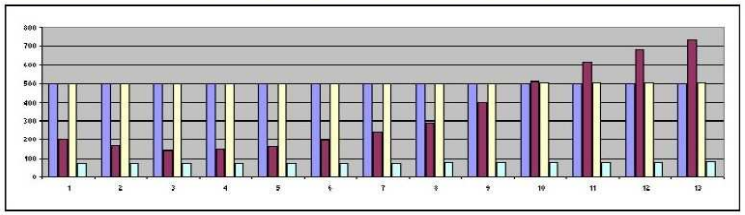
D Total heat balance;														
1 GainRad	MBBtu/h	94	94	94	94	94	94	94	94	94	94	94	94	94
2 CARBHeat	MBBtu/y	14	30	47	169	216	275	320	315	353	360	319	235	218
3 CARBStore	MBBtu/y	169	163	157	150	144	138	131	125	119	112	106	100	93
4 NETHEAT	MBBtu/y	-61	-40	-16	113	166	232	283	284	328	342	307	229	218
5 DIFFTemp	Renkin	-0.01	-0.01	-0	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.04	0.04
6 NEWTemp	Renkin	**500.0**	**499.9**	**499.9**	**500.1**	**500.4**	**500.9**	**501.4**	**501.9**	**503.2**	**504.5**	**505.6**	**506.5**	**507.3**
7 NEWTemp	Farenheit	72.0	71.9	71.9	72.1	72.4	72.9	73.4	73.9	75.2	76.5	77.6	78.5	79.3
8 NEWTemp	Kelvin	296.7	296.7	296.7	296.8	297.0	297.2	297.6	297.9	298.6	299.4	300.1	300.6	301.1
9 NEWTemp	Celcius	23.7	23.7	23.7	23.8	24	24.2	24.6	24.9	25.6	26.4	27.1	27.6	28.1

Etemp-m	Renkin	500	500	500	500	500	500	500	500	500	500	500	500	500
REFCO2	ppm	200	168	143	147	164	196	241	286	397	514	614	678	737
NEWTemp	**Renkin**	**500.0**	**499.9**	**499.9**	**500.1**	**500.4**	**500.9**	**501.4**	**501.9**	**503.2**	**504.5**	**505.6**	**506.5**	**507.3**
NEWTemp	Faranheit	72.0	71.9	71.9	72.1	72.4	72.9	73.4	73.9	75.2	76.5	77.6	78.5	79.3



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TRANSITIONAL thresholds;

Bi.years	Years	Miles>>	31	63	94	125	156	188	219	250	281	313	344	375	406	438	469
1	0.0	16000	64606460646064606460646064606460646064606460646064606460646064606460														
3	0.1	22540	30004423528857976090625663486399642764426451645645764596459														
6	0.2	31612	20723900460651585571586760726211630263616399642364386446645 1														
11	0.4	4978	14382719400045074949531756125842601761476241630863546384639 8														
19	0.6	5659	11192083304138004291470150455334557357675922604161276184621 3														
27	0.9	6485	9451725248932453900429146344934519354125593573658425913594 8														
38	1.2	7352	8121467211027433372400042794541478049915170531654265500553 7														
50	1.6	8268	7281300185724022938346940042204425460947694900500050675101														
63	2.0	9207	6671178167521572627308835440004161430944394547463046874715														
74	2.4	10163	6231091154519832405281432123606400041104208429243564400442 2														
84	2.7	11126	5861020144318502240261229693316365840004067412541704201421 7														
95	3.0	1290	550 94913391716207824252757307633873693390039784025405340 67														
107	3.4	1359	519 88912511603194222672579287731653446372340004006401040 12														
117	3.7	1435	550 94913391716207824252757307633873693390039784025405340 67														

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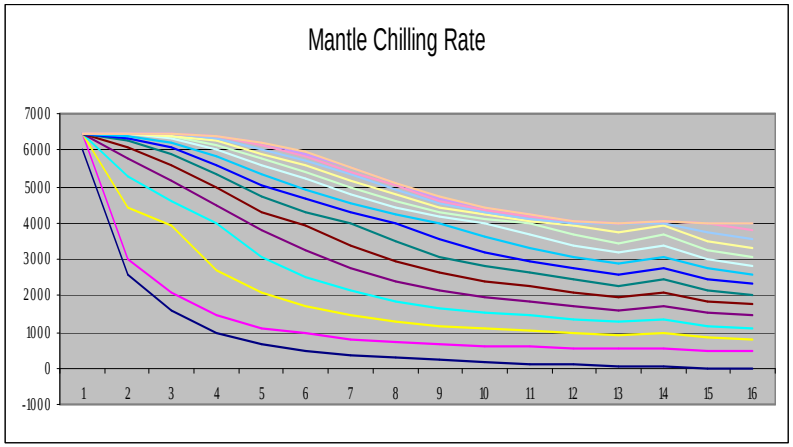

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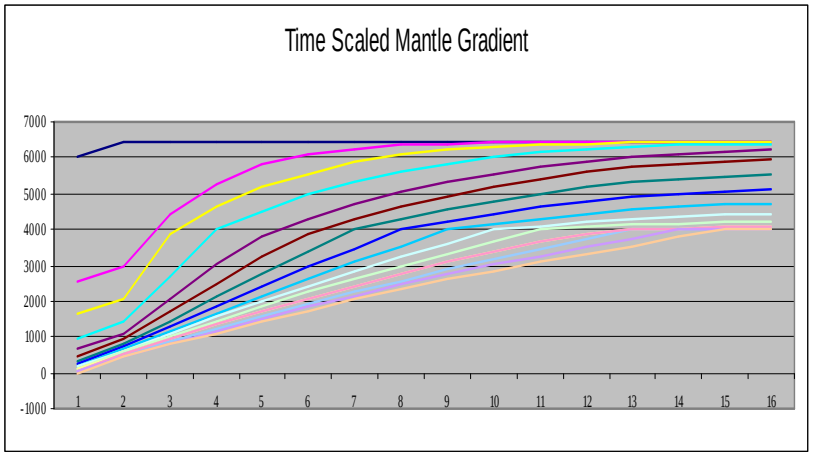

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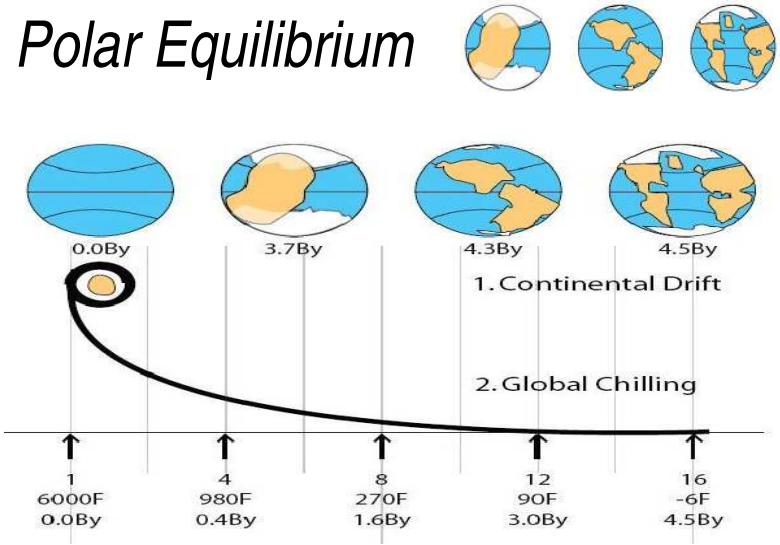

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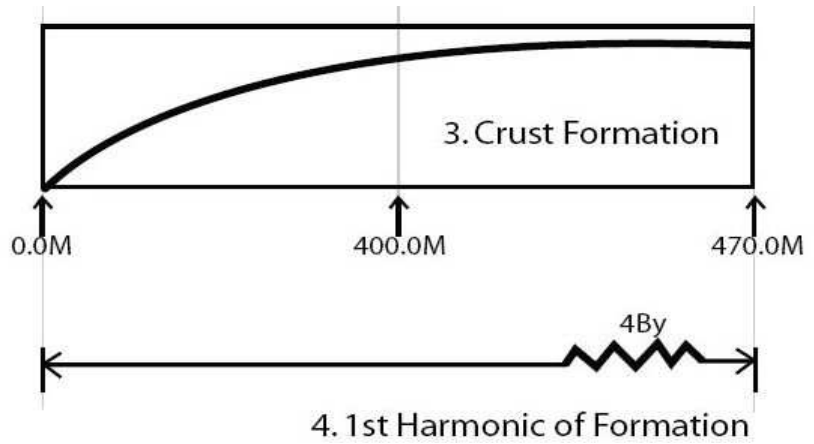

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Macro Model

1,000 Miles =5,580,000ft
40x layers =140,000 ft/layer
Dtime =(dL^2 / 2 / k) x Cp x de
Dtime = (140^2 / 20) x 200 / 8,500
Dtime =196/850x10^8 =23Myears

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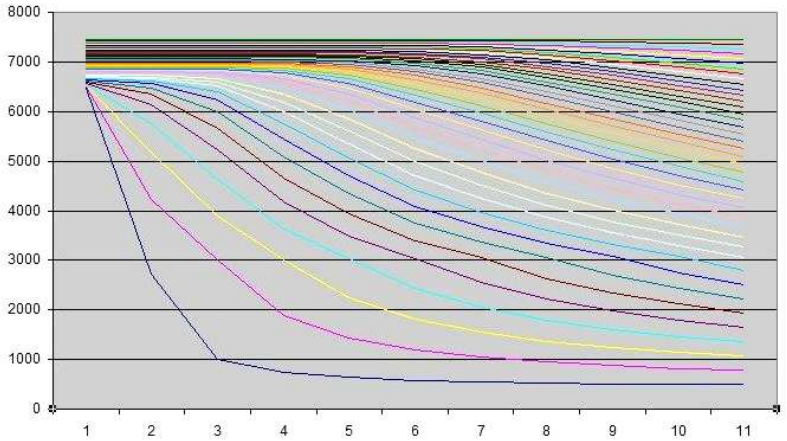

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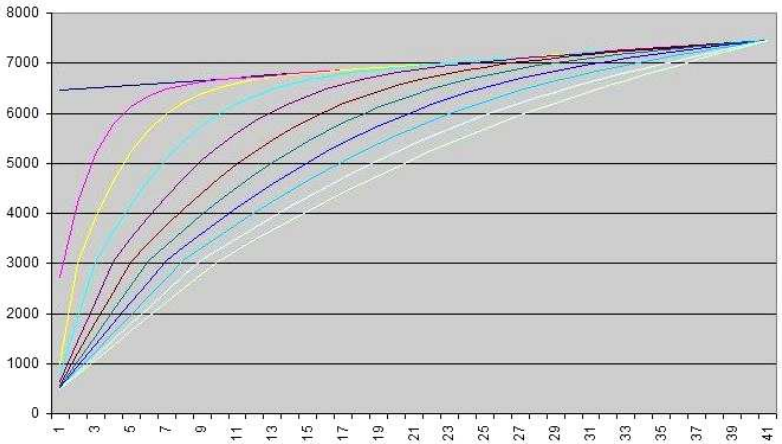

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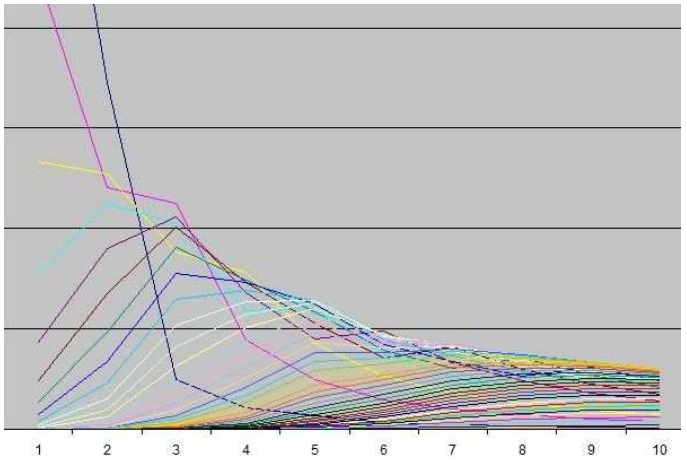

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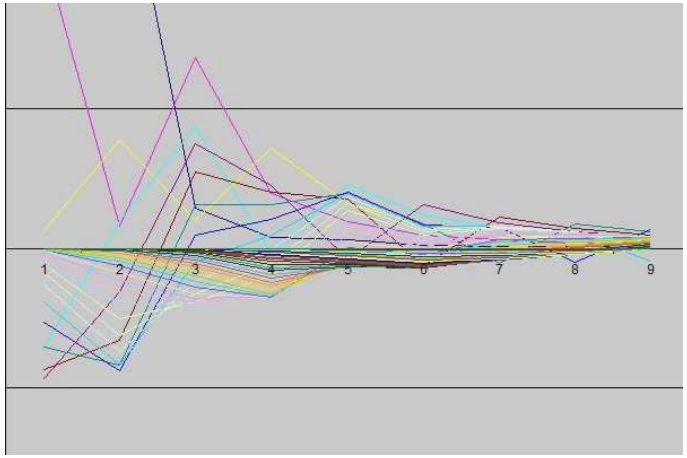

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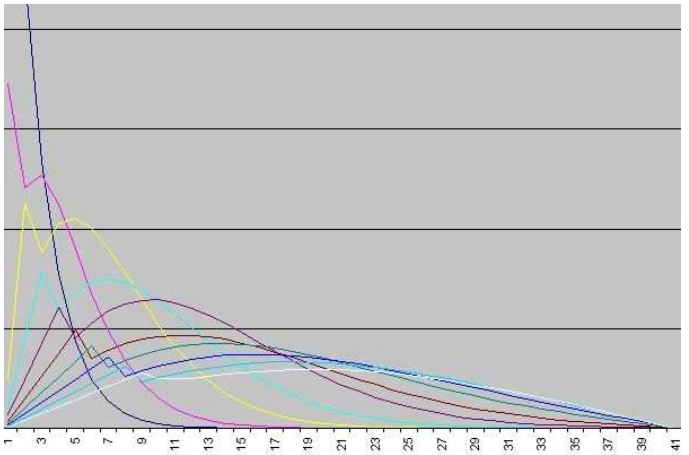

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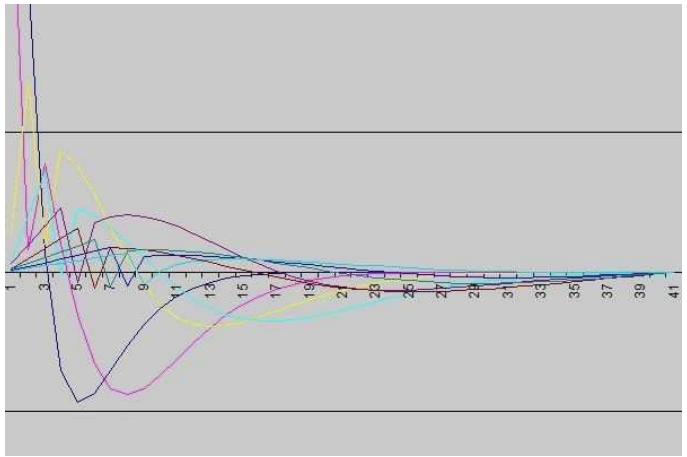

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