THE IONIC GROWING MOON

Six Elements = 99.0% of Mass By Eugene A. Ellis (modified Nov. 2017)

An Ionic Growing Earth (IGE) paper indicates the eight elements comprising 98.8% of Earth's matter is growing exponentially and is of the order y^x where x is the growth rate per CMY (100 MY). Six of these same elements, in different proportions, comprise 99.0% of moon's matter.

Utilizing the same format and procedure outlined in the 8-element paper, tables and graphs are provided that indicates the moon is growing along with our growing Earth, although at different rates. Comparative tables and graphs of the moon and the Earth follow:

	MOON - TABLE 2R - MASS DOUBLING RATES (Energy = Mass) known factors												
		Elemental		Total Earth									
	Atomic Mass	·		Percentages	x (MY) % Rate	<i>y</i> (100 MY) Rate/≅ eV	x (MY) ln 2/ln y						
О	15.9994	14.90335	30.3253	60.90%	18.46813	4.08633							
Fe	55.8470	52.02116	105.8526	2.30%	2.43461	0.04421							
Si	28.0855	26.16148	53.2334	16.40%	8.73027	0.62688							
Mg	24.3050	22.63997	46.0678	4.20%	1.93485	0.18551							
Al	26.9815	25.13311	51.1409	9.40%	4.80724	0.37401							
Ca	40.0800	37.33429	75.9678	5.80%	4.40613	0.15535							
Totals				99.00%	40.7812	5.47229	40.7806						

	EARTH T.	ABLE 2R - MA	SS DOUBLI	NG RATES (Er	nergy = Mass)	known factors				
		Elemental		Total Earth						
	Atomic Mass	AMU/1.073544	Rate (MY)	Percentages	x (MY)	y (100 MY)	x (MY)			
	Atomic Mass	AIVIO/1.075544	Kate (M11)	rercentages	% Rate	Rate/≅ eV	ln 2/ln y			
О	15.9994	14.90335	23.7743	30.10%	7.15608	2.01968				
Fe	55.8470	52.02116	82.9860	32.10%	26.63850	0.61706				
Si	28.0855	26.16148	41.7337	15.10%	6.30179	0.57718				
Mg	24.3050	22.63997	36.1161	13.90%	5.02013	0.61396				
S	32.0600	29.86370	47.6396	2.90%	1.38155	0.09711				
Al	26.9815	25.13311	40.0932	1.40%	0.56131	0.05570				
Ni	58.7000	54.67871	87.2254	1.80%	1.57006	0.03292				
Ca	40.0800	37.33429	59.5570	1.50%	0.89335	0.04018				
Totals				98.80%	49.5228	4.05379	49.5228			

The energy levels for the moon's 6-elements are from NBS-34. By multiplying these levels by the energy decay rate (1 eV / 2.0348) fixes the time of occurrence. The energy decay rate on Earth is 1 eV / 1.5952 MY. The shaded areas in Table 3R are the between times when no energy converts to mass.

MOON - TABLE 3R IONIZATION POTENTIALS of the 6 ELEMENTS

		E	nergy in	eV		
	Fe	Ca	Si	Al	Mg	0
I	7.870	6.113	8.151	5.986	7.646	13.618
II	16.180	11.871	16.345	18.828	15.035	35.116
III	30.651	50.908	33.492	28.447	80.143	54.934
IV	54.800	67.100	45.141	119.990	109.240	77.412
V	75.000	84.410	166.770	153.710	141.260	113.896
VI	99.000	108.780	205.050	190.470	186.500	138.116
VII	125.000	127.700	246.520	241.430	224.940	739.315
VIII	151.060	147.240	303.170	284.590	265.900	871.387
IX	235.040	188.540	351.100	330.210	327.950	
Х	262.100	211.270	401.430	398.570	367.530	
XI	290.400	591.250	476.060	442.070	1761.802	
XII	330.800	656.390	523.500	2085.983	1962.613	
XIII	361.000	726.030	2437.676	2304.080		
XIV	392.200	816.610	2673.108			
XV	457.000	895.120				
XVI	489.500	947.000				
XVII	1266.100	1087.000				

	Time in MY												
2.0348xeV	Fe	Ca	Si	Al	Mg	0							
I	16.0	12.4	16.6	12.2	15.6	27.7							
II	32.9	24.2	33.3	38.3	30.6	71.5							
III	62.4	103.6	68.1	57.9	163.1	111.8							
IV	111.5	136.5	91.9	244.2	222.3	157.5							
V	152.6	171.8	339.3	312.8	287.4	231.8							
VI	201.4	221.3	417.2	387.6	379.5	281.0							
VII	254.4	259.8	501.6	491.3	457.7	1504.4							
VIII	307.4	299.6	616.9	579.1	541.1	1773.1							
IX	478.3	383.6	714.4	671.9	667.3								
Х	533.3	429.9	816.8	811.0	747.9								
XI	590.9	1203.1	968.7	899.5	3584.9								
ХII	673.1	1335.6	1065.2	4244.6	3993.5								
XIII	734.6	1477.3	4960.2	4688.3									
XIV	798.0	1661.6	5439.2										
XV	929.9	1821.4											
XVI	996.0	1927.0											
XVII	2576.3	2211.8											

EARTH TABLE 3R IONIZATION POTENTIALS of the 8 ELEMENTS

			F	Energy in	eV			
	Ni	Fe	Ca	S	Si	Al	Mg	0
I	7.635	7.870	6.113	10.360	8.151	5.986	7.646	13.618
II	18.168	16.180	11.871	23.330	16.345	18.828	15.035	35.116
III	34.170	30.651	50.908	34.830	33.492	28.447	80.143	54.934
IV	54.900	54.800	67.100	47.300	45.141	119.990	109.240	77.412
V	75.500	75.000	84.410	72.680	166.770	153.710	141.260	113.896
VI	108.000	99.000	108.780	88.049	205.050	190.470	186.500	138.116
VII	133.000	125.000	127.700	280.930	246.520	241.430	224.940	739.315
VIII	162.000	151.060	147.240	328.230	303.170	284.590	265.900	871.387
IX	193.000	235.040	188.540	379.100	351.100	330.210	327.950	
Х	224.500	262.100	211.270	447.090	401.430	398.570	367.530	
XI	321.200	290.400	591.250	504.780	476.060	442.070	1761.802	
XII	352.000	330.800	656.390	564.650	523.500	2085.983	1962.613	
XIII	384.000	361.000	726.030	651.630	2437.676	2304.080		
XIV	430.000	392.200	816.610	707.140	2673.108			
XV	464.000	457.000	895.120	3223.836				
XVI	499.000	489.500	947.000	3494.099				
XVII	571.000	1266.100	1087.000					

1.5952xeV	0 56.0 8 87.6 3 123.5
1	0 56.0 8 87.6 3 123.5
III 54.5 48.9 81.2 55.6 53.4 45.4 127	8 87.6 3 123.5
IV 87.6 87.4 107.0 75.5 72.0 191.4 174 V 120.4 119.6 134.7 115.9 266.0 245.2 225	3 123.5
V 120.4 119.6 134.7 115.9 266.0 245.2 225	
	3 181.7
VI 172 3 157 9 173 5 140 5 327 1 303 8 297	
VI 172.0 107.0 170.0 140.0 027.1 000.0 207	.5 220.3
VII 212.2 199.4 203.7 448.1 393.3 385.1 358	8 1179.4
VIII 258.4 241.0 234.9 523.6 483.6 454.0 424	.2 1390.1
IX 307.9 374.9 300.8 604.8 560.1 526.8 523	.2
X 358.1 418.1 337.0 713.2 640.4 635.8 586	.3
XI 512.4 463.3 943.2 805.2 759.4 705.2 2810	.5
XII 561.5 527.7 1047.1 900.7 835.1 3327.6 3130	.8
XIII 612.6 575.9 1158.2 1039.5 3888.7 3675.5	
XIV 686.0 625.7 1302.7 1128.1 4264.2	
XV 740.2 729.0 1427.9 5142.8	
XVI 796.0 780.9 1510.7 5573.9	
XVII 910.9 2019.7 1734.0	

Sequencing the shaded time of the 6 elements forms the first column of Table 4 and one can use these times to calculate the duration of "t" in CMY (100 MY) in the second column. The present rate from MOON Table 2R starts the "y" column at $\frac{5.47229}{5.47229}$. Currently, all six elements are growing.

		MOON - 1	ΓABLE 4R - VA	RIABLE MASS	GROWTH RATE	ES FROM IONIZAT	TONS of the 6 EI	EMENTS		
	Duration	% total						х	%	%
MY	t (CMY)	moon	Element	Rate/≈eV	у	Mass/y ^t (kg)	% of Current	(ln 2/ln y) MY	growing	heating
0	0.242	99.0%	0	0	5.47229	7.34767E+22	100.00%	40.7806	99.0%	0.0%
24.2	0.064	-5.8%	-Ca	-0.15535	5.31694	4.86982E+22	66.28%	41.4835	93.2%	5.8%
30.6	0.273	-4.2%	-Mg	-0.18551	5.13143	4.37593E+22	59.56%	42.3843	89.0%	10.0%
57.9	0.340	-9.4%	-Al	-0.37401	4.75742	2.80011E+22	38.11%	44.4409	79.6%	19.4%
91.9	0.117	-16.4%	-Si	-0.62688	4.13054	1.64766E+22	22.42%	48.8679	63.2%	35.8%
103.6	0.595	5.8%	+Ca	0.15535	4.28589	1.39571E+22	19.00%	47.6282	69.0%	30.0%
163.1	0.811	4.2%	+Mg	0.18551	4.47140	5.87126E+21	7.99%	46.2807	73.2%	25.8%
244.2	0.368	9.4%	+Al	0.37401	4.84541	1.74269E+21	2.37%	43.9248	82.6%	16.4%
281.0	0.264	-60.9%	-O x 75%	-3.06475	1.78067	9.75034E+20	1.33%	120.1321	21.7%	77.3%
307.4	0.319	-2.3%	-Fe	-0.04421	1.73646	8.37271E+20	1.14%	125.6052	19.4%	79.6%
339.3	0.906	16.4%	+Si	0.62688	2.36334	7.02123E+20	0.96%	80.5916	35.8%	63.2%
429.9	0.484	-5.8%	-Ca	-0.15535	2.20799	3.22106E+20	0.44%	87.5097	30.0%	69.0%
478.3	2.696	2.3%	+Fe	0.04421	2.25220	2.19536E+20	0.30%	85.3729	32.3%	66.7%
747.9	1.516	-4.2%	-Mg	-0.18551	2.06669	2.45968E+19	0.03%	95.4819	28.1%	70.9%
899.5	0.965	-9.4%	-Al	-0.37401	1.69268	8.18319E+18	0.01%	131.6993	18.7%	80.3%
996.0	0.692	-2.3%	-Fe	-0.04421	1.64847	4.92435E+18	0.01%	138.6724	16.4%	82.6%

		EARTH - T	ABLE 4R - VAF	RIABLE MASS	GROWTH RATI	S FROM IONIZAT	TIONS of the 8 EI	LEMENTS		
	Duration	% total						x	%	%
MY	t (CMY)	earth	Element	Rate/≈eV	у	Mass/y ^t (kg)	% of Current	(ln 2/ln y) MY	growing	heating
0	0.189	98.8%	0	0	4.05379	5.98000E+24	100.00%	49.5228	98.8%	0.0%
18.9	0.051	-1.5%	-Ca	-0.04018	4.01361	4.59003E+24	76.76%	49.8778	97.3%	1.5%
24.0	0.214	-13.9%	-Mg	-0.61396	3.39965	4.27597E+24	71.50%	56.6448	83.4%	15.4%
45.4	0.266	-1.4%	-Al	-0.05570	3.34395	3.29085E+24	55.03%	57.4200	82.0%	16.8%
72.0	0.092	-15.1%	-Si	-0.57718	2.76677	2.38701E+24	39.92%	68.1106	66.9%	31.9%
81.2	0.466	1.5%	+Ca	0.04018	2.80695	2.17367E+24	36.35%	67.1591	68.4%	30.4%
127.8	0.127	13.9%	+Mg	0.61396	3.42091	1.34374E+24	22.47%	56.3578	82.3%	16.5%
140.5	0.509	-2.9%	-S	-0.09710	3.32380	1.14942E+24	19.22%	57.7089	79.4%	19.4%
191.4	0.289	1.4%	+Al	0.05570	3.37950	6.23689E+23	10.43%	56.9213	80.8%	18.0%
220.3	0.207	-30.1%	-O x 75%	-1.51476	1.86474	4.38662E+23	7.34%	111.2377	50.7%	48.1%
241.0	0.250	-32.1%	-Fe	-0.61707	1.24767	3.85577E+23	6.45%	313.2457	18.6%	80.2%
266.0	0.710	15.1%	+Si	0.57718	1.82486	3.64827E+23	6.10%	115.2362	33.7%	65.1%
337.0	0.211	-1.5%	-Ca	-0.04018	1.78468	2.38020E+23	3.98%	119.6656	32.2%	66.6%
358.1	0.168	-1.8%	-Ni	-0.03292	1.75176	2.10637E+23	3.52%	123.6396	30.4%	68.4%
374.9	0.732	32.1%	+Fe	0.61707	2.36883	1.91704E+23	3.21%	80.3747	62.5%	36.3%
448.1	0.643	2.9%	+S	0.09710	2.46593	1.01970E+23	1.71%	76.7971	65.4%	33.4%
512.4	0.739	1.8%	+Ni	0.03292	2.49885	5.70729E+22	0.95%	75.6851	67.2%	31.6%
586.3	1.189	-13.9%	-Mg	-0.61396	1.88489	2.90068E+22	0.49%	109.3516	53.3%	45.5%
705.2	0.757	-1.4%	-Al	-0.05570	1.82919	1.36516E+22	0.23%	114.7834	51.9%	46.9%
780.9	0.542	-32.1%	-Fe	-0.61707	1.21212	8.64279E+21	0.14%	360.3164	19.8%	79.0%

It is generally accepted that all matter stems from elemental hydrogen; hence, the density of all matter would be the same. However, when elemental mass is growing on Earth, there is a delay in expressing the volumetric change until sufficient pressure builds up within the planet to release and expand the radius. The IGE Lagging Radius paper demonstrates different time delays and its effect on the Earth's radius.

The above two charts indicate the current mass doubling rate for the moon is 40.7806 MY while the current mass doubling rate of Earth is 49.5228 MY (ninth column). It shows that the 6-element mixture comprising 99% of the moon is gaining mass very much faster than the 8-element mixture comprising 98.8% of Earth's matter.

	MOON - TABLE 5R -MASS FROM TABLE 4R WITH ~100 YEAR LAGGING RADIUS												
					(40.7812 MY)			(40.7813 MY)					
MY	x	Element	Rate/eV	Rate of Growth	Mass (kg)	Current Mass	Rate of Growth	Radius (km)	Current Radius	Density (g/cc)	Current Density	Gravity (m/sec^2)	Current Gravity
0	0.242	0	0	5.47229	7.34767E+22	100.00%	5.47227	1738.22	100.00%	3.3400	100.00%	1.62	100.00%
24.2	0.064	-Ca	-0.15535	5.31694	4.86982E+22	66.28%	5.31692	1515.51	87.19%	3.3400	100.00%	1.41	87.19%
30.6	0.273	-Mg	-0.18551	5.13143	4.37593E+22	59.56%	5.13141	1462.44	84.13%	3.3400	100.00%	1.36	84.13%
57.9	0.340	-Al	-0.37401	4.75742	2.80011E+22	38.11%	4.75740	1260.22	72.50%	3.3400	100.00%	1.18	72.50%
91.9	0.117	-Si	-0.62688	4.13054	1.64766E+22	22.42%	4.13052	1056.03	60.75%	3.3400	100.00%	0.99	60.75%
103.6	0.595	+Ca	0.15535	4.28589	1.39571E+22	19.00%	4.28587	999.20	57.48%	3.3400	100.00%	0.93	57.48%
163.1	0.811	+Mg	0.18551	4.47140	5.87126E+21	7.99%	4.47138	748.69	43.07%	3.3400	100.00%	0.70	43.07%
244.2	0.368	+Al	0.37401	4.84541	1.74269E+21	2.37%	4.84539	499.42	28.73%	3.3400	100.00%	0.47	28.73%
281.0	0.264	-0 x 75%	-3.06475	1.78067	9.75034E+20	1.33%	1.78064	411.53	23.68%	3.3400	100.00%	0.38	23.67%
307.4	0.319	-Fe	-0.04421	1.73646	8.37271E+20	1.14%	1.73643	391.15	22.50%	3.3399	100.00%	0.37	22.50%
339.3	0.906	+Si	0.62688	2.36334	7.02123E+20	0.96%	2.36331	368.86	21.22%	3.3399	100.00%	0.34	21.22%
429.9	0.484	-Ca	-0.15535	2.20799	3.22106E+20	0.44%	2.20796	284.48	16.37%	3.3399	100.00%	0.27	16.37%
478.3	2.696	+Fe	0.04421	2.25220	2.19536E+20	0.30%	2.25217	250.36	14.40%	3.3399	100.00%	0.23	14.40%
747.9	1.516	-Mg	-0.18551	2.06669	2.45968E+19	0.03%	2.06666	120.70	6.94%	3.3398	99.99%	0.11	6.94%
899.5	0.965	-Al	-0.37401	1.69268	8.18319E+18	0.01%	1.69265	83.63	4.81%	3.3397	99.99%	0.08	4.81%
996.0	0.692	-Fe	-0.04421	1.64847	4.92435E+18	0.01%	1.64844	70.61	4.06%	3.3397	99.99%	0.07	4.06%

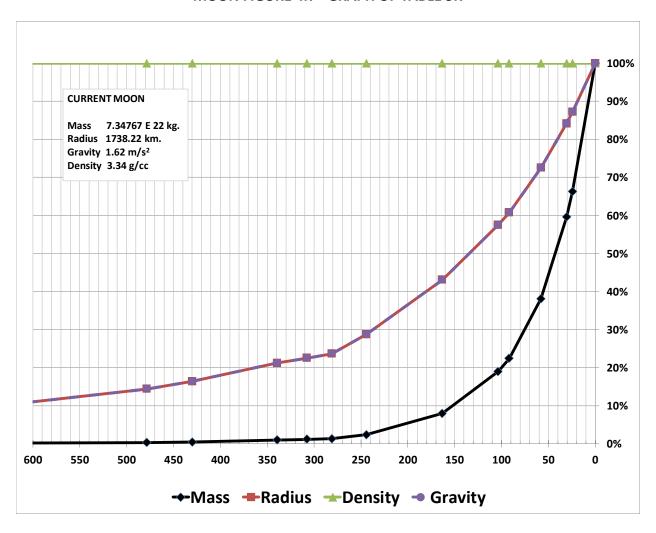
	EARTH TABLE 5R -MASS FROM TABLE 4R WITH ~100 YEAR LAGGING RADIUS													
					(49.5228 MY)			(49.5229 MY)						
MY	х	Element	Rate/eV	Rate of Growth	Mass (kg)	Current Mass	Rate of Growth	Radius (km)	Current Radius	Density (g/cc)	Current Density	Gravity (m/sec^2)	Current Gravity	
0	0.189	0	0	4.05379	5.98E+24	100.00%	4.05378	6378.96	100.00%	5.5000	100.00%	9.80	100.00%	
18.9	0.051	-Ca	-0.04018	4.01361	4.59003E+24	76.76%	4.01360	5840.56	91.56%	5.5000	100.00%	8.97	91.56%	
24.0	0.214	-Mg	-0.61396	3.39965	4.27597E+24	71.50%	3.39964	5704.20	89.42%	5.5000	100.00%	8.77	89.42%	
45.4	0.266	-Al	-0.05570	3.34395	3.29085E+24	55.03%	3.34394	5227.40	81.95%	5.5000	100.00%	8.03	81.95%	
72.0	0.092	-Si	-0.57718	2.76677	2.38701E+24	39.92%	2.76675	4696.79	73.63%	5.5000	100.00%	7.22	73.63%	
81.2	0.466	+Ca	0.04018	2.80695	2.17367E+24	36.35%	2.80693	4552.47	71.37%	5.5000	100.00%	7.00	71.37%	
127.8	0.127	+Mg	0.61396	3.42091	1.34374E+24	22.47%	3.42089	3878.13	60.80%	5.5000	100.00%	5.96	60.80%	
140.5	0.509	-S	-0.09710	3.32380	1.14942E+24	19.22%	3.32379	3681.38	57.71%	5.5000	100.00%	5.66	57.71%	
191.4	0.289	+Al	0.05570	3.37950	6.23689E+23	10.43%	3.37949	3002.66	47.07%	5.5000	100.00%	4.61	47.07%	
220.3	0.207	-0 x 75%	-1.51476	1.86474	4.38662E+23	7.34%	1.86473	2670.30	41.86%	5.5000	100.00%	4.10	41.86%	
241.0	0.250	-Fe	-0.61707	1.24767	3.85577E+23	6.45%	1.24766	2557.93	40.10%	5.4999	100.00%	3.93	40.10%	
266.0	0.710	+Si	0.57718	1.82486	3.64827E+23	6.10%	1.82484	2511.19	39.37%	5.4999	100.00%	3.86	39.37%	
337.0	0.211	-Ca	-0.04018	1.78468	2.3802E+23	3.98%	1.78466	2177.99	34.14%	5.4999	100.00%	3.35	34.14%	
358.1	0.168	-Ni	-0.03292	1.75176	2.10637E+23	3.52%	1.75174	2091.05	32.78%	5.4999	100.00%	3.21	32.78%	
374.9	0.732	+Fe	0.61707	2.36883	1.91704E+23	3.21%	2.36881	2026.42	31.77%	5.4999	100.00%	3.11	31.77%	
448.1	0.643	+S	0.09710	2.46593	1.0197E+23	1.71%	2.46592	1641.89	25.74%	5.4999	100.00%	2.52	25.74%	
512.4	0.739	+Ni	0.03292	2.49885	5.70729E+22	0.95%	2.49884	1353.10	21.21%	5.4998	100.00%	2.08	21.21%	
586.3	1.189	-Mg	-0.61396	1.88489	2.90068E+22	0.49%	1.88488	1079.83	16.93%	5.4998	100.00%	1.66	16.93%	
705.2	0.757	-Al	-0.05570	1.82919	1.36516E+22	0.23%	1.82918	839.94	13.17%	5.4998	100.00%	1.29	13.17%	
780.9	0.542	-Fe	-0.61707	1.21212	8.64279E+21	0.14%	1.21211	721.23	11.31%	5.4997	100.00%	1.11	11.31%	

The left half of Tables 5R is essentially Tables 4R. The right half results when the increasing radius (volume) follows the increasing mass by 100 years. To obtain a 100-year lag, one merely adds 100 to the total "x" time from the eighth column of MOON Table 2R (40,780,600 years +

100 years = 40,780,700 years). The starting rate of growth for the radius in MOON Table 5R is then $\frac{5.47227}{(0.407807)}$ (0.407807).

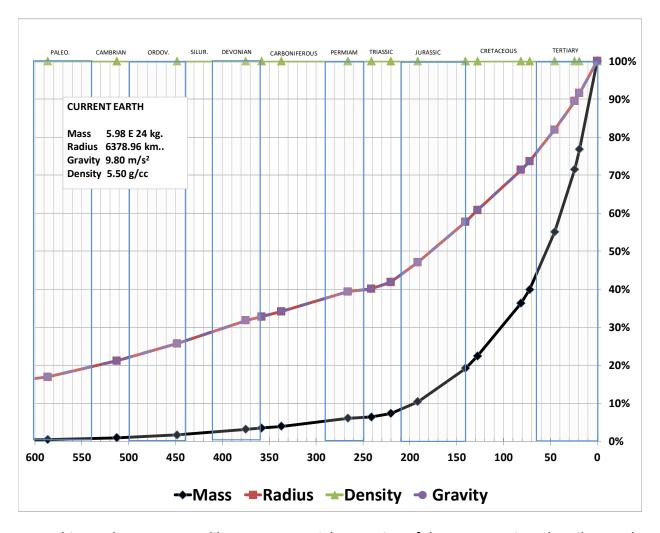
Expanding the first column of the above two charts to include specific or incremental divisions between any or all-past times appears possible. This would facilitate calculations of the distance between the Earth and the moon rather than picking percentages from the time curves below.

MOON FIGURE 4R – GRAPH OF TABLE 5R



From this graph, notice-accelerating expansion of the mass started ~250 MYA when the moon was around 30% of its current size. Also note the three radius doublings - 1) 50% @ $^{\sim}$ 135 MY, 2) 25%@ $^{\sim}$ 270 MY, and 3) 12.5% @ $^{\sim}$ 560 MY.

EARTH FIGURE 4R – GRAPH of TABLE 5R



From this graph, one can readily see exponential expansion of the mass continued until around 200 MYA when it suddenly started to accelerate.

In addition, notice the Earth's radius doubled twice. Once at \sim 470 MYA when Earth's radius was \sim 25% of current (\sim 1600 km), and again at \sim 175 MYA when Earth's radius was \sim 50% of current (\sim 3200 km). These radii are representative of a total Earth and do not distinguish differences between growing/expanding continents and growing/expanding sea floors. When each elemental atom is growing, it does so wherever it is located; crust, mantle or core.

Overall, the above curves are exponential. However, the doubling rates between the points do not change and therefore are linear as shown.

SUPPORTING EXAMPLES

Gravitational constant (G) = $6.674 E - 11 Nm^2 kg^2$ Present Earth mass (M_e) = 5.980 E 24 kg. Present moon mass (M_m) =7.34767 E 22 kg. Present Earth-moon distance (D) =384,400 km = 3.844 E 8 m. Newton's Law of Universal Gravitation: $F = GM_eM_m/D^2$.

Force between Earth and moon:

 $F_{e-m} = (6.674 \text{ E} - 11) (5.980 \text{ E} 24) (7.34767 \text{ E} 22) / (3.844 \text{ E} 8)^2 = 1.9846 \text{ E} 20 \text{ Newton (Earth-moon equilibrium constant)}.$

If the rate of growth were universal, then the Form would also equal 1,9846 F.8. For

If the rate of growth were universal, then the F_{e-m} would also equal 1.9846 E 8. For instance, both radii at 50% (as determined by the mass):

 $F_{e-m} = (6.674 \text{ E} - 11) (0.5 \text{ x} 5.980 \text{ E} 24) (0.5 \text{ x} 7.34767 \text{ E} 22) / (0.5 \text{ x} 3.844 \text{ E} 8)^2 = 1.9846 \text{ E} 20$ Newton...(equilibrium).

However, the Earth and moon growth rates are not the same. At 175 MYA, Earth's radius was 50% and moon's radius was 40%:

 $F_{e-m} = (6.674 \text{ E} - 11) (0.5 \text{ x} 5.980 \text{ E} 24) (0.4 \text{ x} 7.34767 \text{ E} 22) / (0.447 \text{ x} 3.844 \text{ E} 8)^2 = 1.9865 \text{ E} 20 \text{ Newton...(almost equilibrium)}.$

Thus, the distance to the moon 175 MYA was around 171,800 km ($0.447 \times 384,400 \text{ km}$) or ~171,800 kilometers.

Quick guestion...What was the distance to the moon 65 MYA?

Quick estimate...From Figures 4R at 65 MYA, the moon's radius was ~70% while Earth's was ~76%. The average is ~73%.

 $0.73 \times 384,400 = 280,612$. The moon was approximately 100,000 kilometers closer 65 MYA (384,400 km - 280,612 km = 103,788 km).

COMMENTS AND CONCLUSIONS

The data and methodology of an Ionic Growing Earth demonstrates the same eight basic elements that started the planet have been growing and expanding Earth's radius in consonance with recorded geology. The smaller moon consists of six of those same elements, yet the smaller moon grows at a faster rate.

Growing elemental atoms counters an imagined reality in modern science that essentially states... atoms cannot change size. It is not a lie because we are taught that it is an unquestionable truth. If it is true, then how can the entire universe grow/expand when exempting the very elemental matter of which it consists? Undetectable **dark matter** supposedly explains the gravitational missing matter. All elemental matter began as dark matter. The elemental atoms of all matter become spectra-visible by acquiring electrons upon ionizing for the first time (or becoming electro-magnetic). It appears that all elemental atoms have ionized; consequently, there would be no remaining elemental dark matter. Perhaps the gravitational dark matter is unaccounted growing elemental matter.

The Ionic Growing Earth and the Ionic Growing Moon indicating atoms of the different elements growing only at specific times seem radical. However, knowing the time when the elemental atoms ionize and when they are growing (and when they are not) answers many expansionist's questions. Questions like...what was the size of the Earth or the moon 100 MYA; when did water first appear on Earth or elsewhere; when could life begin; why are dinosaur fossils so large; what does the leap-second indicate; or from whence cometh the heat that segregate cores-mantles-crusts from original homogeneous mixtures?

The examples indicate that Gravity (G) is a constant like Pi (π) that is found in things that change together (relationally....as Victor says). It also reveals that force (F), as applied in the Newton Inverse Square Law, is an Earth-moon equilibrium constant that determines the outward pushed distance when one or both bodies increase in mass. The examples indicate the orbiting moon has a "relational" constant of 1.9865 E 20 Newton with its Earth partner. Each orbiting cosmic body has its own equilibrium constant relative to its partner.

Victor (a.k.a. Godsriddle) also said..."No scientist is allowed to question the medieval notion that matter is unchanging." That statement pinpoints why modern science falters with changing sizes, volumes, weights, orbits, gravities, lengths of day, etc. of past times throughout the geological ages. An assumption that matter changes size is just as valid (or insane) as an unchanging one. Elemental atoms, as presented in this lonic Model, periodically grow at varying times, which adds mass to the celestial bodies thereby expanding the universe by increasing separation distances. The Standard Model atoms will remain stuck until scientist question the *certainty* of a medieval concept regarding unchanging matter.

http://ionic-expanding-earth.Weebly.com

©2013 Eugene A. Ellis

Please link to source when citing protected material.