

## The Osmium 187/186 Dating Method

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How reliable is radiometric dating? We are repeatedly told that it proves the Earth to be billions of years old. If radiometric dating is reliable than it should not contradict the evolutionary model. According to the Big Bang theory the age of the Universe is 10 to 15 billion years.<sup>1</sup> Standard evolutionist publications give the age of the universe as 13.75 Billion years.<sup>2,3</sup>

Standard evolutionist geology views the Earth as being 4.5 billion years old. Here are some quotes from popular text: “The age of the Earth is  $4.54 \pm 0.05$  billion years.”<sup>4</sup> “The Solar System, formed between 4.53 and 4.58 billion years ago.”<sup>1</sup> “The age of 4.54 billion years found for the Solar System and Earth.”<sup>1</sup> “A valid age for the Earth of 4.55 billion years.”<sup>5,6</sup> Evolutionists give the age of the galaxy as “11 to 13 billion years for the age of the Milky Way Galaxy.”<sup>1,7</sup>

### 187Os–186Os Systematics of Os–Ir–Ru

These rocks from south western Oregon were dated in 2004 by scientist from the Department of Geology, University of Maryland using the Argon 40/39 and Uranium/Lead dating methods.<sup>8</sup> According to the article the true age is 162 million years old: “An age of 162 Ma for the Josephine ophiolite has been established via <sup>40</sup>Ar–<sup>39</sup>Ar and U–Pb geochronology of mafic portions of the ophiolite.”<sup>9</sup> Another magazine gives the same chronology: “A rapid sequence of events, from ophiolite generation to thrust emplacement, has been determined using <sup>40</sup>Ar/<sup>39</sup>Ar and Pb/U geochronology. Ophiolite generation occurred at 162–164 Ma, a thin hemipelagic sequence was deposited from 162 to 157 Ma, and flysch deposition took place between 157 and 150 Ma.”<sup>10</sup> The article contains tables with Osmium 187/186 ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formula below used in standard geology text books<sup>11-13</sup> we can calculate dates from the undated isotopic ratios.

(1)

$$t = \frac{1.04 - (^{187}\text{Os}/^{186}\text{Os})}{0.050768}$$

In the above formula, t = billions of years. The same date can be calculated from the Osmium 187/188 ratios. If we use another formula<sup>14</sup> we can convert the Osmium 187/188 ratio to the Osmium 187/186 ratio.

(2)

$$\frac{^{187}\text{Os}}{^{186}\text{Os}} \times 0.12035 = \frac{^{187}\text{Os}}{^{188}\text{Os}}$$

(3)

$$\frac{^{187}\text{Os}}{^{186}\text{Os}} = \frac{(^{187}\text{Os} \div ^{188}\text{Os})}{0.12035}$$

(4)

$$t = \frac{\left( \frac{(^{187}\text{Os} \div ^{188}\text{Os})}{0.12035} \right) - 1.04}{0.050768}$$

## The Osmium 187/187 Dating Method

<b>Table 1</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-439</b>	<b>588</b>	<b>811</b>
<b>Maximum</b>	<b>637</b>	<b>2,351</b>	<b>3,808</b>
<b>Minimum</b>	<b>-3,646</b>	<b>115</b>	<b>104</b>

We can see from table 1 the date range and percentage of discordance. There is a 4,434 million year range between the youngest and oldest dates. None of the fifteen dates even come close. Eight are impossible negative or future ages.

### Determination of 187Os in Molybdenite

These rocks were analysed in 2001 by scientist from the National Research Centre of Geo Analysis, Beijing China using plasma-mass spectrometry methods.<sup>15</sup> The article contains a table<sup>16</sup> with Osmium 187/186 ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get twenty seven absolutely impossible negative ages.

<b>Table 2</b>	<b>Billion Years</b>	<b>Million Years</b>
<b>Average</b>	<b>6.78</b>	<b>6,783</b>
<b>Maximum</b>	<b>13.56</b>	<b>13,559</b>
<b>Minimum</b>	<b>3.17</b>	<b>3,165</b>

### 186Os–187Os Systematics of Hawaiian Picrites

These Hawaiian rocks were analysed in 2009 by scientist from the Department of Geology, University of Maryland.<sup>17</sup> According to the article the true age is 2 billion years old: “Ratios were calculated for a model age of 2 Ga, assuming that the material had chondritic.”<sup>18</sup> The article contains a three tables<sup>19</sup> with Osmium 187/186 ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 3. The fifty nine dates range between -726 and -143,516 million years old. The choice of this as the true age is just a random guess. Table three below is a summary of table two’s isotopic ratios in the original article.

<b>Table 3</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-55,151</b>	<b>2,758</b>	<b>53,367</b>
<b>Maximum</b>	<b>-817</b>	<b>7,176</b>	<b>141,516</b>
<b>Minimum</b>	<b>-143,516</b>	<b>41</b>	<b>164</b>

### Evidence from Icelandic Picrites

These rocks from Iceland were analysed in 2007 by scientist from the NASA Johnson Space Centre, Houston, Texas.<sup>20</sup> According to the article the true age is 60 million years old: “The Os and He isotopes of Iceland picrites provide important insights into the Iceland plume system from 60 Ma to present.”<sup>21</sup> The article contains two tables<sup>22</sup> with Osmium 187/186 ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 4. The thirty four dates are between 1,783 and -2,218 million years old. There is a four billion years range between the youngest and oldest dates. The author’s choice of 60 million years as the true age is just a random guess. The difference between the so called true age [Model Age] and the calculated ratio age varies between 894 and 2,279 million years in error.

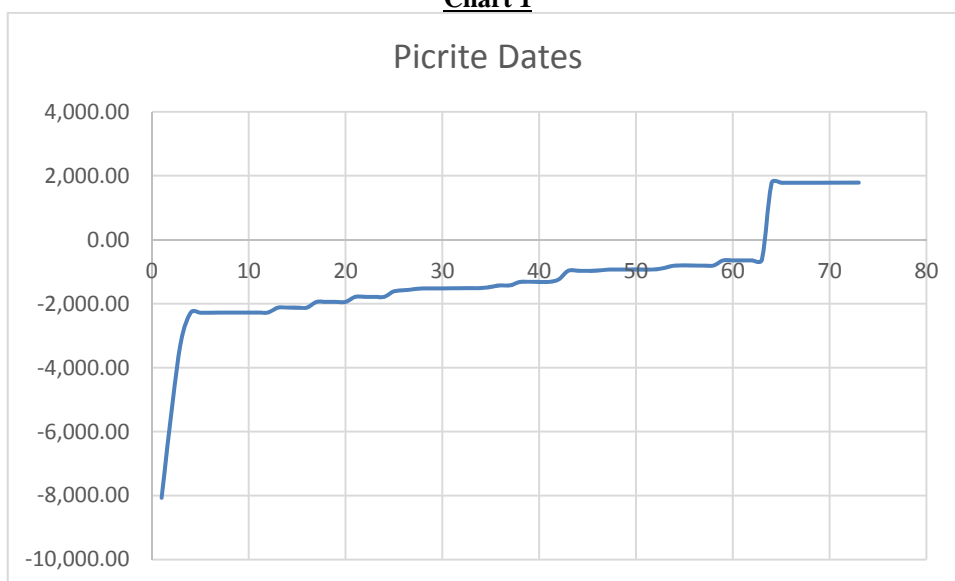
<b>Table 4</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-503</b>	<b>2,691</b>	<b>1,597</b>
<b>Maximum</b>	<b>1,783</b>	<b>3,798</b>	<b>2,279</b>
<b>Minimum</b>	<b>-2,219</b>	<b>1,490</b>	<b>894</b>

**186Os/187Os Systematics of Hawaiian Picrites**

These rocks from Hawaii were analysed in 1999 by scientist from the Department of Geology, University of Maryland.<sup>23</sup> According to the article the true age is 2 billion years old: “various possible ancient recycled oceanic crustal components (upper crust, basalt, reducing sediments and metalliferous sediments) formed at 2 Ga.”<sup>24</sup> The article contains a table<sup>25</sup> with Osmium 187/186 ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 5. Out of the seventy three dates, there is a 9.85 billion year range between the youngest [-8,068] and oldest [1,785] dates. The choice of 2 billion years as the true age is just a random guess.

<b>Table 5</b>	<b>Million Years</b>
<b>Average</b>	<b>-1,187</b>
<b>Maximum</b>	<b>1,785</b>
<b>Minimum</b>	<b>-8,068</b>

**Chart 1**



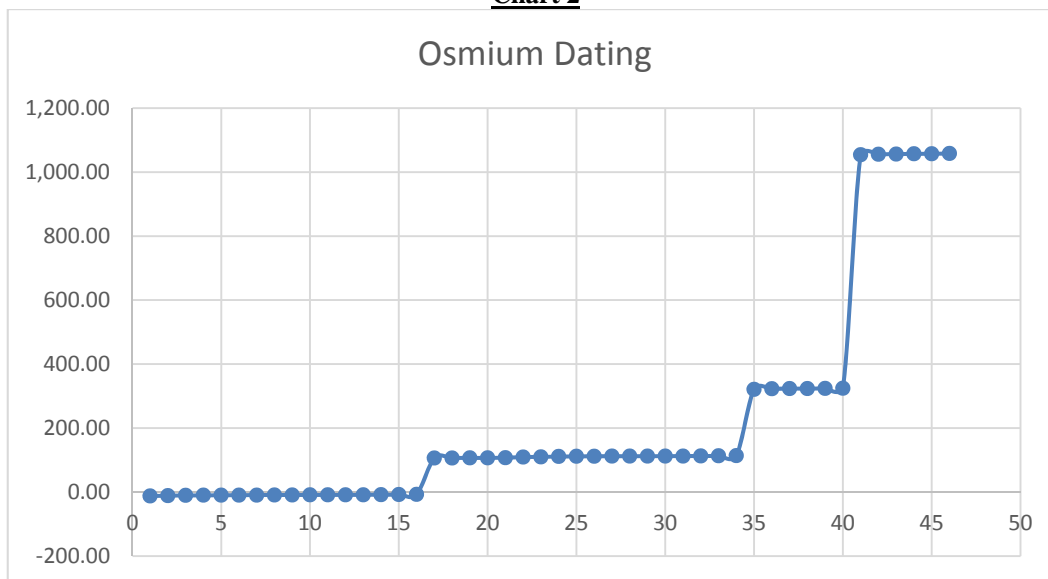
**186Os/188Os and 187Os/188Os Measurements (Part 2)**

These rocks were analysed in 2007 by scientist from the University of Durham.<sup>26</sup> According to the article the true age is 600 million years old.<sup>27</sup> The article contains two tables<sup>28</sup> with Osmium 187/186 ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 6, 7 and chart 2. Out of the sixty two dates, there is a 9.1 billion year range between the youngest [-8,075] and oldest [1,058] dates. The choice of 600 million years as the true age is just a random guess.

<b>Table 6</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-7,674</b>	<b>1,379</b>	<b>8,274</b>
<b>Maximum</b>	<b>-5,945</b>	<b>1,446</b>	<b>8,675</b>
<b>Minimum</b>	<b>-8,075</b>	<b>1,091</b>	<b>6,545</b>

<b>Table 7</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>219</b>	<b>2,340</b>	<b>499</b>
<b>Maximum</b>	<b>1,058</b>	<b>8,380</b>	<b>612</b>
<b>Minimum</b>	<b>-12</b>	<b>118</b>	<b>276</b>

Chart 2



**The Sudbury Igneous Complex, Ontario**

These rocks from Canada were analysed in 2000 by scientist from the Department of Geology, University of Maryland.<sup>29</sup> According to the article the true age is 1800 million years old. “The ages agree with the canonical value of 1850 Ma for the Sudbury Igneous Complex (SIC). For Hanging Wall and Deep Zone ores at Strathcona, the age of 1780 Ma may reflect resetting by dyke activity.”<sup>29</sup> The article contains two tables<sup>30</sup> with Osmium ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in tables 8 and 9. The forty one dates range from -128 billion years old to -2.3 trillion years old. The choice of 1.8 billion years as the true age is just a random guess.

<b>Table 8</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-220,265</b>	<b>12,337</b>	<b>222,065</b>
<b>Maximum</b>	<b>-152,828</b>	<b>17,660</b>	<b>317,886</b>
<b>Minimum</b>	<b>-316,086</b>	<b>8,590</b>	<b>154,628</b>

<b>Table 9</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-632,140</b>	<b>35,219</b>	<b>633,940</b>
<b>Maximum</b>	<b>-128,289</b>	<b>132,624</b>	<b>2,387,235</b>
<b>Minimum</b>	<b>-2,385,435</b>	<b>7,227</b>	<b>130,089</b>

**187Os/186Os in Oceanic Island Basalts**

These rocks from various islands were analysed in 1994 by scientists from Paris.<sup>31</sup> According to the article the true age for the samples varies from historic volcanic eruptions to eruptions 16 million years old.<sup>32</sup> The article contains two tables<sup>32</sup> with Osmium ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in tables 10 and 11. The so called true age for the samples ranges from 100 years old to 16 million years old. The dates obtained from the sample ratios ranges from 827 million years old to 10.7 billion years old. The choice of zero to 16 million years old as the true age is just a random guess. The ratios from the second table give ages between -800 billion and -3.5 trillion years old!

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Model Age	Model Age	Model Age
Million Years	% Difference	Difference
0.0001	1,634,888,118	1,635
0.0001	1,497,005,988	1,497
0.0001	1,319,728,963	1,320
0.0001	1,378,821,305	1,379
0.15	853,556	1,280
1	94,548	944
1	86,669	866
0.55	175,486	965
9	38,738	3,477
16	67,094	10,719
0.0001	827,292,783	827
0.0001	846,990,230	847
4.5	39,395	1,768
4.5	37,644	1,689
0.35	489,622	1,713
0.0001	3,762,212,417	3,762
<b>Average</b>	<b>704,301,410</b>	<b>2,168</b>
<b>Maximum</b>	<b>3,762,212,417</b>	<b>10,719</b>
<b>Minimum</b>	<b>37,644</b>	<b>827</b>

Table 11	Billion Years	Million Years
<b>Average</b>	<b>-797.944</b>	<b>-797,944</b>
<b>Maximum</b>	<b>-0.197</b>	<b>-197</b>
<b>Minimum</b>	<b>-3,564.450</b>	<b>-3,564,450</b>

### 186Os/188Os and 187Os/188Os Measurements (Part 1)

These rocks were analysed in 2007 by scientist from the University of Durham.<sup>33</sup> According to the article the true age is 600 million years old.<sup>27</sup> The article contains a table<sup>34</sup> with Osmium 187/186 ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 12. Out of the twenty one dates, there is a 9.8 billion year range between the youngest [-8,074] and oldest [1,783] dates. The choice of 600 million years as the true age is just a random guess.

Table 12	Million Years	% Discordance	Difference
<b>Average</b>	<b>-3,380.88</b>	<b>899</b>	<b>5,677</b>
<b>Maximum</b>	<b>1,783.58</b>	<b>1,446</b>	<b>8,675</b>
<b>Minimum</b>	<b>-8,074.99</b>	<b>297</b>	<b>2,379</b>

### The Marine 187Os/186Os Record

These rocks were analysed in 1994 by scientist from the Max-Planck-Institute, Mainz, Germany.<sup>35</sup> According to the article the true age is 80 million years old.<sup>36</sup> The article contains a table<sup>37</sup> with Osmium 187/186 ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 13. Out of the twenty one dates, there is a 135 billion year range between the youngest [-3,821] and oldest [-139,459] dates. The choice of 80 million years as the true age is just a random guess.

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<b>Table 13</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-59,648</b>	<b>74,659</b>	<b>59,568</b>
<b>Maximum</b>	<b>-3,821</b>	<b>174,422</b>	<b>139,378</b>
<b>Minimum</b>	<b>-139,458</b>	<b>4,877</b>	<b>3,901</b>

### Re-Os Isotope Systematics in Black Shales

These rocks from the Himalayas were analysed in 1999 by scientists from Physical Research Laboratory, in India. <sup>38</sup> According to the article the true age for the samples is 550 million years old. <sup>38</sup> The article contains two tables <sup>39</sup> with Osmium ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in tables 14 and 15. The so called true age for the samples is 600 million years old. The thirty dates obtained from the sample ratios ranges from -264 billion years old to -1.87 trillion years old. The choice of 600 million years old as the true age is just a random guess.

<b>Table 14</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-497,072</b>	<b>82,945</b>	<b>497,672</b>
<b>Maximum</b>	<b>-146,254</b>	<b>312,170</b>	<b>1,873,020</b>
<b>Minimum</b>	<b>-1,872,420</b>	<b>24,476</b>	<b>146,854</b>

<b>Table 15</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-435,973</b>	<b>72,762</b>	<b>436,573</b>
<b>Maximum</b>	<b>-264,143</b>	<b>185,611</b>	<b>1,113,663</b>
<b>Minimum</b>	<b>-1,113,063</b>	<b>44,124</b>	<b>264,743</b>

### A Metamorphosed Early Cambrian Crust

These rocks from the Eastern Austrian Alps, were analysed in 2002 by scientists from Germany and Austria. <sup>40</sup> According to the article the true age for the samples is 600 million years old. <sup>41</sup> The article contains a table <sup>42</sup> with Osmium ratios that have no dates beside them. If we put the tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 16. The so called true age for the samples is 600 million years old. The thirty three dates obtained from the sample ratios ranges from 1 billion years old to -710 billion years old. The choice of 600 million years old as the true age is just a random guess.

<b>Table 16</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-144,811</b>	<b>24,264</b>	<b>145,441</b>
<b>Maximum</b>	<b>1,091</b>	<b>118,428</b>	<b>710,565</b>
<b>Minimum</b>	<b>-709,965</b>	<b>137</b>	<b>131</b>

### Cameroon Volcanic Line Lavas

These rocks from the Cameroon in Africa, were analysed in 2002 by scientists from Germany. <sup>43</sup> According to the article the lava deposits formed in the Cenozoic Era making the so called true age for the samples 60 million years old. <sup>43</sup> The article contains two tables <sup>44</sup> with Osmium and Lead 207/206 ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 17. The so called true age for the samples is 60 million years old. The nineteen dates obtained from the sample ratios ranges from -289 million years old to 19.6 billion years old. The forty nine Lead 207/206 ratios give dates between 4800 and 5000 billion years old. The choice of 60 million years old as the true age is just a random guess.

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Table 17	187Os/188Os	207Pb/206Pb	Difference
Average	-2,852	4,899	7,751
Maximum	289	4,959	4,670
Minimum	-19,613	4,837	24,450

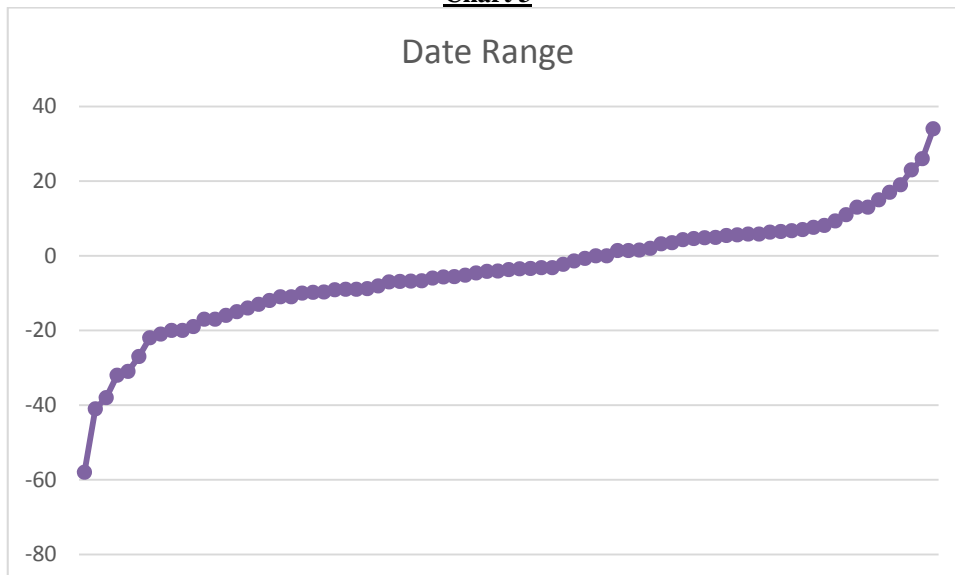
### Lens with Sub-Baltic Shield

These rocks from Sweden, were analysed in 2002 by scientists from Queens College, New York. <sup>45</sup> According to the article the so called true age for the samples 450 million years old. <sup>45</sup> The article contains a table <sup>46</sup> with Osmium ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 18 and chart 4. The so called true age for the samples is 450 million years old. The forty dates obtained from the sample ratios a 42 billion year range from 1,205 million years old to -40,956 million years old.

“Minimum model ages (TRD) assuming that Re addition occurred either at 450Ma or more recently (i.e. today) yield meaningless future ages in almost all cases. Model ages (TMA in Table 5) that assume Re was present at the time of sulphide formation are also scattered and meaningless for most samples.” <sup>47</sup> Seventy nine calculated dates [Chart 3] actually listed in the article <sup>46</sup> are between 34 billion and -58 billion years old. There is an 82 billion year age difference between the youngest and oldest dates. Forty nine dates [62%] are impossible negative or future ages. Twenty three dates [29%] are over 4.6 billion years old. Twenty dates [25%] are over 5 billion years old. Nine dates [11%] are over 11 billion years old. You can see the random spread in chart 3. The choice of 450 million years old as the true age is just a random guess.

Table 18	Million Years	% Discordance	Difference
Average	-10,204	2,381	10,692
Maximum	1,205	9,201	41,406
Minimum	-40,956	170	755

**Chart 3**



### The Beni Bousera Peridotite Massif

These rocks from Morocco, were analysed in 2003 by scientists from Durham University. <sup>48</sup> According to the article the so called true age for the samples are between 540 and 4,000 million years old. <sup>49</sup> The article contains a table <sup>49</sup> with Osmium ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 19. The nine dates obtained from the sample ratios have a 12.867 trillion year range from -9.3 billion years old to -12.876 trillion years old.

<b>Table 19</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-2,027,093</b>	<b>313,374</b>	<b>2,028,605</b>
<b>Maximum</b>	<b>-9,302</b>	<b>2,384,647</b>	<b>12,877,095</b>
<b>Minimum</b>	<b>-12,876,555</b>	<b>1,488</b>	<b>9,972</b>

### Chromite Deposits Of the Ipueira

These rocks from Brazil, were analysed in 2002 by scientists from Brazil. <sup>50</sup> According to the article the so called true age for the samples are 2,000 million years old. <sup>50</sup> The article contains a table <sup>51</sup> with Osmium ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 20. The eleven dates obtained from the sample ratios have an 48,294 million year range from 2,662 million years old to -50,956 million years old. The choice of 2,000 million years old as the true age is just a random guess.

<b>Table 20</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-5,936</b>	<b>531</b>	<b>13,635</b>
<b>Maximum</b>	<b>2,662</b>	<b>2,648</b>	<b>52,956</b>
<b>Minimum</b>	<b>-50,956</b>	<b>151</b>	<b>3,010</b>

### Origin of Paleoproterozoic Komatiites

These rocks from Finnish Lapland, were analysed in 2003 by scientists from the Department Of Geology, University Of Maryland. <sup>52</sup> According to the article the so called true age for the samples are 2,000 million years old. <sup>53</sup> The article contains a table <sup>54</sup> with Osmium ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 21. The thirty five dates obtained from the sample ratios have an 11.07 trillion year range from 1,922 million years old to -11,068,187 million years old. The choice of 2,000 million years old as the true age is just a random guess.

<b>Table 21</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-487,016</b>	<b>24,478</b>	<b>489,016</b>
<b>Maximum</b>	<b>1,922</b>	<b>553,509</b>	<b>11,070,187</b>
<b>Minimum</b>	<b>-11,068,187</b>	<b>71</b>	<b>78</b>

### Evidence from Gorgona Island and Curacao

These rocks from Gorgona Island, Colombia and Curacao Island (Dutch Caribbean), were analysed in 1998 by scientists from the Department Of Geology, University Of Maryland. <sup>55</sup> The model age for Gorgona Island is 90 million years old: "Previous studies have reported K-Ar and 40Ar/39Ar ages for basalts from Gorgona. These ages range from approximately 86 to 92 Ma, averaging about 88 Ma." <sup>56</sup> The model age for Curacao Island is 90 million years old also: "Basaltic lavas from Curacao Lava Formation have been dated by 40Ar/39Ar step heating techniques at 88–90 Ma." <sup>57</sup> The article contains a table <sup>58</sup> with Osmium ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 22. The fifty one dates obtained from the sample ratios have a 64 billion year range from 183



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million years old to 64.4 billion years old. Twelve dates are over 10 billion years old. The choice of 90 million years old as the true age is just a random guess.

<b>Table 22</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-9,427</b>	<b>10,575</b>	<b>9,517</b>
<b>Maximum</b>	<b>-183</b>	<b>71,720</b>	<b>64,548</b>
<b>Minimum</b>	<b>-64,458</b>	<b>303</b>	<b>273</b>

### Rocks from Southern West Greenland

These rocks from Southern West Greenland, were analysed in 1999 by scientists from The Australian National University, Canberra.<sup>59</sup> The model age for two sets of samples is 3,460 and 3,810 million years old.<sup>60</sup> The article contains a table<sup>60</sup> with Osmium ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get twenty three dates. Only two are as old as the so called model age. The choice 3,500 million years as the true age is just a random guess.

<b>Age</b>	<b>Age</b>	<b>Age</b>	<b>Age</b>
<b>Million Years</b>	<b>Million Years</b>	<b>Million Years</b>	<b>Million Years</b>
<b>3,348</b>	<b>3,231</b>	<b>2,541</b>	<b>1,457</b>
<b>3,344</b>	<b>3,112</b>	<b>2,272</b>	<b>1,372</b>
<b>3,318</b>	<b>3,056</b>	<b>2,012</b>	<b>966</b>
<b>3,312</b>	<b>2,799</b>	<b>1,776</b>	<b>783</b>
<b>3,272</b>	<b>2,722</b>	<b>1,487</b>	<b>321</b>

### Evidence from 2.8 Ga Komatiites

These rocks from Kostomuksha on the Russian Finland border were analysed in 1999 by scientists from The University of Chicago.<sup>61</sup> The model age for the samples is 2,800 million years old.<sup>61</sup> The article contains a table<sup>62</sup> with Osmium ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get fourteen dates. None are as old as the so called model age. There is a 21,701 million year range between the youngest and oldest dates. The choice 2,800 million years as the true age is just a random guess.

<b>Table 24</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-8,333</b>	<b>316</b>	<b>-8,978</b>
<b>Maximum</b>	<b>2,215</b>	<b>696</b>	<b>4,582</b>
<b>Minimum</b>	<b>-19,486</b>	<b>1</b>	<b>-22,286</b>

### 187Os Isotopic Constraints

These rocks from Zimbabwe were analysed in 2001 by scientists from the Department of Geology, University of Maryland.<sup>63</sup> The model age for the samples is between 790 and 3,260 million years old.<sup>64</sup> The article contains a table<sup>64</sup> with Osmium ratios that have no dates beside them. If we put the Osmium tables into Microsoft Excel and use the formulas in standard geology text books we get the values in table 25. Out of the twenty three dates ten [43%] are impossible future or negative ages. Thirteen [56%] are over 6 billion years old. Nine [34%] are over 12 billion years old. The choice of the true age is just a random guess.

<b>Table 25</b>	<b>Million Years</b>	<b>% Discordance</b>	<b>Difference</b>
<b>Average</b>	<b>-54,043</b>	<b>2,900</b>	<b>56,272</b>
<b>Maximum</b>	<b>2,372</b>	<b>25,627</b>	<b>458,724</b>
<b>Minimum</b>	<b>-456,934</b>	<b>171</b>	<b>48</b>

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