# Radiometric Dating Errors 

A Rebuttal of Brent Dalrymples Book<br>"The Age Of The Earth"<br>By Paul Nethercott, 2013

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# Concordia Isochron Dating <br> By Paul Nethercott <br> May 2012 

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." ${ }^{4}$ "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

Evolutionists give the age of the galaxy as " 11 to 13 billion years for the age of the Milky Way Galaxy." ${ }^{1,7}$ Let us remember this as we look at the following dating as given in secular science journals.

## Age and Mineralogy of Supergene Uranium

Theses rocks from the Bohemian Massif, South East Germany ${ }^{8}$ were dated in 2010 using the Uranium-Lead dating method. The table in the essay has three columns of isotopic ratios, ${ }^{206} \mathrm{~Pb} /{ }^{238} \mathrm{U},{ }^{207} \mathrm{~Pb} / /^{235} \mathrm{U}$ and ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$. You will notice in Table 4 the original article ${ }^{9}$ that there are dates besides the ${ }^{206} \mathrm{~Pb} /{ }^{238} \mathrm{U}$ and ${ }^{207} \mathrm{~Pb} /{ }^{235} \mathrm{U}$ ratios but no dates beside the ${ }^{207} \mathrm{~Pb} / /^{206} \mathrm{~Pb}$ ratios. The first two sets of ratios and dates agree with each other between 94 and 101 percent accuracy. If we use the computer program Isoplot ${ }^{10}$ and calculate the ages of the ${ }^{207} \mathrm{~Pb}{ }^{206} \mathrm{~Pb}$ ratios we see why not dates have been put beside them. In Table $\mathbf{1}$ we can see that many dates are negative. That is logically impossible. How can the rock have formed millions of years in the future?

Table 1

| Sample | Pb-206/207 | Sample | Pb-206/207 |
| :---: | :---: | :---: | :---: |
| Name | Negative Ages | Name | Negative Ages |
| A30 | -29 | A06 | -29 |
| A35 | -8 | A10 | -45 |
| A04 | -18 | A11 | -83 |
| A07 | -8 | A12 | -23 |
| A10 | -8 | A13 | -133 |
| A11 | -13 | A17 | -116 |
| A18 | -8 | A19 | -72 |
| A19 | -18 | A21 | -2 |
| A20 | -8 | A26 | -34 |
|  |  | A27 | -13 |
|  |  | A29 | -45 |
|  |  | A39 | -8 |
|  |  | A40 | 3 |
|  | A41 | -50 |  |

In Table 2 we can see that the $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ dates are between 1,000 to 21,000 percent discordant when compared to the two Uranium-Lead dating methods. Here is just one of many times where geology journals use selective evidence to try and prove evolution. If the third column or ratios were dated and added to the essay you can see how silly it would look.

Table 2

| Sample | Difference | Sample | Difference |
| :---: | :---: | :---: | :---: |
| Name | Percent | Name | Percent |
| A26 | $\mathbf{1 , 0 8 7}$ | A01 | $\mathbf{1 , 0 0 6}$ |
| A29 | $\mathbf{1 , 1 9 2}$ | A16 | 1,073 |
| A25 | $\mathbf{1 , 2 0 2}$ | A32 | 1,891 |
| A41 | $\mathbf{1 , 3 3 8}$ | A31 | 2,067 |
| A07 | $\mathbf{1 , 9 6 4}$ | A30 | 3,070 |
| A19 | 2,385 | A29 | 3,539 |
| A10 | 2,389 | A33 | 10,452 |
| A22 | 2,551 | A36 | 16,112 |
| A18 | 3,126 |  |  |
| A30 | 3,129 |  |  |
| A24 | 3,360 |  |  |
| A09 | 3,612 |  |  |
| A13 | 4,616 |  |  |
| A05 | 4,881 |  |  |
| A06 | 4,982 |  |  |
| A11 | 5,350 |  |  |
| A25 | 5,479 |  |  |
| A08 | 5,628 |  |  |
| A42 | $\mathbf{6 , 2 1 5}$ |  |  |
| A04 | 6,551 |  |  |
| A22 | 7,031 |  |  |
| A43 | 10,253 |  |  |
| A17 | 10,673 |  |  |
| A21 | 15,256 |  |  |
| A20 | 21,500 |  |  |
|  |  |  |  |

## $\underline{207 \mathrm{~Pb}-206 \mathrm{~Pb} \text { and } 40 \mathrm{Ar}-39 \mathrm{Ar} \text { ages from SW Montana }}$

These rocks from North America were dated in 2002 using both ${ }^{11}$ Potassium-Argon and Lead-Lead dating methods. Again the no dates beside the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios. If we add dates we soon see why. The first table in his article has dates ${ }^{12}$ using the ${ }^{40} \mathrm{Ar}-{ }^{39} \mathrm{Ar}$ dating method. The third table ${ }^{13}$ has the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios.

Table 3

| Sample | K-Ar Dating | K-Ar Dating | Pb Dating | Pb Dating |
| :---: | :---: | :---: | :---: | :---: |
| Name | Max Age | Min Age | Max Age | Min Age |
| RRCR2 | 1,818 | 1,695 | 4,471 | 1,895 |
| RRSW1 | 1,806 | 1,740 | 5,011 | 4,032 |
| HLM2 | 1,853 | 1,620 | 4,522 | 1,848 |
| TRMR2 | 1,729 | 1,199 | 5,049 | 2,644 |

If we use the computer program Isoplot and calculate the ages of the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios we see why not dates have been put beside them. The Potassium-Argon and Lead-Lead dating methods are extremely discordant. The author's use of data is very selective. Dates that agree are added and those that do not are omitted. This happens over and over in geology magazines. We can see from the table below that many dates are older than the evolutionist view of the age of Earth. How can such an absurdity be possible? How can the Earth be older than itself?

Table 4

| Sample | Million | Age |
| :---: | :---: | :---: |
| Name | Years | Category |
| RRSW1 | 5,005 | Older Than The Solar System |
| RRSW1 | 5,011 | Older Than The Solar System |
| RRSW1 | $\mathbf{4 , 9 3 9}$ | Older Than Earth |
| TRMR2 | 5,015 | Older Than The Solar System |
| TRMR2 | 5,049 | Older Than The Solar System |
| ${ }^{207} \mathbf{P b} /{ }^{206} \mathbf{P b}$ Dates |  |  |

## Uranium-Thorium-Lead Dating

This dating ${ }^{14}$ was done in 1999 on meteorite samples by the Department of Earth and Planetary Sciences, Hiroshima University in Japan. Below we can see the isotopic ratios take from Table 2 in the original article. ${ }^{15}$ Using the computer program Isoplot we calculate the ages of the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios we see why not dates have been put beside them.

Table 5

| Pb-207 | Million | Age |
| :---: | :---: | :---: |
| Pb-206 | Years | Category |
| 0.889 | 5,071 | Older Than Solar System |
| 0.916 | 5,114 | Older Than Solar System |
| 0.876 | 5,051 | Older Than Solar System |
| 0.869 | 5,039 | Older Than Solar System |
| 0.922 | 5,123 | Older Than Solar System |
| 0.867 | 5,036 | Older Than Solar System |

$\mathbf{5 , 0 5 1}$ to $\mathbf{5 , 1 2 3}$ million years old.


According to the Iscohron [1, 2 and 3] diagrams in the article ${ }^{16}$ the meteorites are only supposed to be 200 million years old! This means that the dates are 4,800 million years in error. The ratio of the so called "true" age versus the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ age is 25 to 1 . The author deliberately chose not to put the dates beside the isotopic ratios because they would show how utterly ridiculous the whole system is. According to the Iscohron diagram in the article, the maximum error level is only 83 million years. The error level is 4934 years if we compare it to the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ age. This means the error level is 59 times in error.

## Pb-Pb dating of Chondrules

The meteorite samples ${ }^{17}$ were dates in 2009 by scientists form the Geological Museum, University of Copenhagen and The University of Texas at Austin. If we use Isoplot and run some of the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios given in the article ${ }^{18}$ through Microsoft Excel we see that many of the ratios produce ages over 5 billion years old.

Below we can see a Concordia diagram taken from the article ${ }^{19}$ that shows the age of the rocks to be 4,565 million years old. As you can see the diagram claims that the error margins is only 810,000 years! If we add the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios dates we can see that the diagram is out by 550 million years. That means the error margin given in the diagram is 677 times to short!

## Diagram 2



Table 6

| Sample | Age | Age |
| :---: | :---: | :---: |
| Number | Million Years | Category |
| C2-L1 | 5,194 | Older Than Solar System |
| C2-L2 | 5,190 | Older Than Solar System |
| C2-L3 | 5,089 | Older Than Solar System |
| C2-L6 | 5,020 | Older Than Solar System |
| C4 | 5,174 | Older Than Solar System |
| C4-L6 | 5,013 | Older Than Solar System |
| C4-L7 | 5,094 | Older Than Solar System |
| C4-L8 | 5,051 | Older Than Solar System |
| C7 | 5,091 | Older Than Solar System |
| C7-L7 | 5,032 | Older Than Solar System |
| C7-L8 | 5,021 | Older Than Solar System |
| C12-10 | 5,050 | Older Than Solar System |
| C12-L2 | 5,063 | Older Than Solar System |
| C12-L3 | 5,206 | Older Than Solar System |
| C12-L5 | 5,002 | Older Than Solar System |

5,002 to 5,206 million years old.

## $\underline{\mathrm{Pb}-\mathrm{Pb} \text { Dating Constraints }}$

This dating ${ }^{20}$ was done in 2007 on meteorite samples by the Washington State University, Department of Geology. We can see from table seven which data in my essay the data was obtained from in Audrey Bouvier's essay.

Table 7

| Her Essay | My Essay |
| :---: | :---: |
| Table 2, Page 1587 | Table 8 |
| Table 3, Page 1588 | Table 9 |
| Table 4, Page 1589 | Table 10 |
| Table 5, Page 1590 | Table 11 |
| Table 6, Page 1590 | Table 12 |

One of the concordia diagrams ${ }^{21}$ in the article gives the following data:
Chondrules: $4565.5 \pm 1.2 \mathrm{Ma}$
Pyroxenes: $4564.3 \pm 0.8 \mathrm{Ma}$
Phosphates: $4562.7 \pm 0.7 \mathrm{Ma}$
We are told that the date of 4,565 million years old is only one million years in error at the maximum. If run some of the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios given in the article through Isoplot, we see that many of the ratios produce ages over 5 billion years old. The oldest is 5,379 million years. The error margin given in the article is 814 times in error.

Table 8

| Sample | Age | Age |
| :---: | :---: | :---: |
| Name | Million Years | Category |
| Allende, Whole-rock-R0 | 5,334 | Older Than Solar System |
| CV3, L0 | 5,325 | Older Than Solar System |
| MNHN, L1 | 5,250 | Older Than Solar System |
| MNHN, L2 | 5,258 | Older Than Solar System |
| MNHN, L1 | 5,296 | Older Than Solar System |
| MNHN, L2 | 5,029 | Older Than Solar System |
| UCLA, L1 | 5,244 | Older Than Solar System |
| UCLA, L1 | 5,244 | Older Than Solar System |
| UCLA, L1 | 5,245 | Older Than Solar System |
| UCLA, Olivine-R0 | 5,344 | Older Than Solar System |
| UCLA, L0 | 5,336 | Older Than Solar System |
| Murchison, Whole-rock-R0 | 5,333 | Older Than Solar System |
| CM2, L0 | 5,321 | Older Than Solar System |
| CM2, CAI-R0-Murch | 5,238 | Older Than Solar System |
| CM2, L0 | 5,267 | Older Than Solar System |
| ENSL, Blanke | 5,016 | Older Than Solar System |
| Canyon-Diablo, Troilitef | 5,379 | Older Than Solar System |

$\mathbf{5 , 0 1 6}$ to $\mathbf{5 , 3 7 9}$ million years old.

Table 9

| Pb-206/Pb-207 | Age | Age |
| :---: | :---: | :---: |
| Ratio | Million Years | Category |
| $\mathbf{0 . 8 6 6 6 5}$ | 5,035 | Older Than Solar System |
| $\mathbf{0 . 8 4 5 1 8}$ | 5,000 | Older Than Solar System |
| $\mathbf{0 . 8 6 3 0 6}$ | $\mathbf{5 , 0 3 0}$ | Older Than Solar System |
| $\mathbf{0 . 8 4 9 8 3}$ | $\mathbf{5 , 0 0 8}$ | Older Than Solar System |
| 0.96359 | 5,185 | Older Than Solar System |
| $\mathbf{0 . 9 8 0 8 1}$ | 5,210 | Older Than Solar System |
| $\mathbf{0 . 9 1 1 2 0}$ | 5,106 | Older Than Solar System |
| $\mathbf{1 . 0 9 0 6 8}$ | 5,359 | Older Than Solar System |
| $\mathbf{0 . 8 7 9 5 8}$ | 5,056 | Older Than Solar System |
| $\mathbf{0 . 9 6 9 0 6}$ | $\mathbf{5 , 1 9 3}$ | Older Than Solar System |

5,000 to 5,359 million years old.

Table 10

| Pb-206/Pb-207 | Age | Age |  |
| :---: | :---: | :---: | :---: |
| Ratio | Million Years | Category |  |
| 0.85705 | 5,020 | Older Than Solar System |  |
| 0.85871 | 5,022 | Older Than Solar System |  |
| 0.85888 | 5,023 | Older Than Solar System |  |
| 0.85681 | 5,019 | Older Than Solar System |  |
| 5 |  |  |  |

Table 11

| Pb-206/Pb-207 | Age | Age |
| :---: | :---: | :---: |
| Ratio | Million Years | Category |
| 0.90695 | 5,100 | Older Than Solar System |
| 0.86255 | 5,029 | Older Than Solar System |
| 0.85613 | 5,018 | Older Than Solar System |
| 0.86644 | 5,035 | Older Than Solar System |
| 0.92835 | 5,133 | Older Than Solar System |
| 0.91990 | 5,120 | Older Than Solar System |
| 0.92542 | 5,128 | Older Than Solar System |
| 0.90807 | 5,101 | Older Than Solar System |
| 0.90861 | 5,102 | Older Than Solar System |

Table 12

| Pb-206/Pb-207 | Age | Age |
| :---: | :---: | :---: |
| Ratio | Million Years | Category |
| 0.88990 | 5,073 | Older Than Solar System |
| 0.87125 | 5,043 | Older Than Solar System |
| 0.89581 | 5,082 | Older Than Solar System |
| 0.89269 | 5,077 | Older Than Solar System |
| 0.85401 | 5,015 | Older Than Solar System |
| 0.89561 | 5,082 | Older Than Solar System |
| 0.98433 | 5,215 | Older Than Solar System |
| 0.92618 | 5,129 | Older Than Solar System |
| 0.99857 | 5,235 | Older Than Solar System |
| 0.95025 | 5,166 | Older Than Solar System |
| 1.01559 | 5,259 | Older Than Solar System |

## U-Th-Pb Dating of Hydrothermal ore Deposits

This dating ${ }^{22}$ was done in 2010 on rocks from eastern China. If we look at one of the tables ${ }^{23}$ in the original essay we see four columns of isotopic data ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb},{ }^{207} \mathrm{~Pb} /{ }^{235} \mathrm{U},{ }^{206} \mathrm{~Pb} /{ }^{238} \mathrm{U}$ and ${ }^{208} \mathrm{~Pb} /{ }^{232} \mathrm{Th}$. Three have dates beside them but here are no dates beside the ${ }^{207} \mathrm{~Pb} / /^{206} \mathrm{~Pb}$ ratios. If we run the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios through Isoplot we soon see why there are no dates beside them. According to the Concordia diagrams in the essay ${ }^{24}$ the rocks are supposed to be 137 million years old with an average age of 120 million years.

Table 13

| Sample | Maximum | Minimum | Average |
| :---: | :---: | :---: | :---: |
| Name | Age | Age | Age |
| TLS01 | 2,508 | 272 | $\mathbf{9 4 3}$ |
| TLS02 | 346 | 8 | 254 |
| S38 | 1,682 | -294 | 354 |
| S38 | 2,508 | -139 | $\mathbf{8 9 9}$ |
| S39 | 440 | -325 | $\mathbf{9 4}$ |
|  |  |  |  |

Table 14

| Sample | Maximum | Minimum | Difference | Percentage | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Age | Age | Age | Difference | Category |
| S38-1-a1 | 12,721 | 136 | 12,585 | $9,253 \%$ | Older Than Galaxy |
| S38-3-a1 | 7,663 | 136 | 7,527 | $5,534 \%$ | Older Than Solar System |
| S38-3-a2 | 11,457 | 44 | 11,413 | $25,938 \%$ | Older Than Galaxy |
| S38-3-a3 | 7,175 | 130 | 7,045 | $5,419 \%$ | Older Than Solar System |

Some of the dates listed in the article ${ }^{23}$ are older than the age of the Solar System and Galaxy! The author offers an explanation: "Due to the very low Th contents in the calcite-hosted titanite, no meaningful $208 \mathrm{~Pb} / 232 \mathrm{Th}$ ages were obtained." ${ }^{25}$

## U-Th-Pb dating of Yucca Mountain, Nevada

This dating was done ${ }^{26}$ in 2008 by the U.S. Geological Survey office in Denver, Colorado. You will notice in Table 1 the original article ${ }^{27}$ that there are no dates beside the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios. If we use the computer program Isoplot and calculate the ages of the ${ }^{207} \mathrm{~Pb} /^{206} \mathrm{~Pb}$ ratios we see why not dates have been put beside them.

Table 15

| Sample | 206-Pb/207-Pb | Age |
| :---: | :---: | :---: |
| Name | Million Years | Category |
| HD1939Pb1-Cc | 5,474 | Older Than Solar System |
| HD2055Pb6-Cc | 5,632 | Older Than Solar System |
| HD2055Pb7-Cc1 | 5,512 | Older Than Solar System |
| HD2055Pb7-Cc2 | 5,523 | Older Than Solar System |
| HD2055Pb10-Cc | 5,587 | Older Than Solar System |
| HD-2057-Pb1-Cc | 7,864 | Older Than Solar System |
| HD-2057-Pb2-Cc | 6,577 | Older Than Solar System |
| HD2059Pb4-Cc | 7,474 | Older Than Solar System |
| HD2062Pb2-Cc | 5,528 | Older Than Solar System |
| HD2062Pb3-Mn | 5,450 | Older Than Solar System |
| HD2065Pb4-Cc | 7,202 | Older Than Solar System |
| HD2074Pb1-Cc3 | 6,304 | Older Than Solar System |
| HD2074Pb2-Cc1 | 7,569 | Older Than Solar System |
| HD2074Pb2-Cc2 | 6,519 | Older Than Solar System |
| HD2089APb2-Cc | 6,973 | Older Than Solar System |
| HD2089APb3-Mn | 5,483 | Older Than Solar System |
| HD2092Pb1-Cc | 5,567 | Older Than Solar System |
| HD2092Pb1-Mn | 5,452 | Older Than Solar System |
| HD2098Pb3-Cc | 5,891 | Older Than Solar System |
| HD2109Pb1-Cc | 5,806 | Older Than Solar System |
| HD2155Pb1-Cc | 6,349 | Older Than Solar System |
| HD2177Pb2-Cc | 5,792 | Older Than Solar System |
| HD2177Pb1-Mn | 5,452 | Older Than Solar System |
| HD2227Pb1-Cc | 6,109 | Older Than Solar System |
| HD2227Pb1-Mn | 5,453 | Older Than Solar System |
| HD2231Pb1-Cc | 5,472 | Older Than Solar System |
| HD2233Pb2-Ch1 | 7,933 | Older Than Solar System |
| HD2233Pb2-Ch2 | 8,186 | Older Than Solar System |
| HD2233Pb3-Ch | 7,583 | Older Than Solar System |
| HD2233Pb4-Ch | 7,898 | Older Than Solar System |
|  | $5,450 ~ t o ~ 8,186 ~ m i l l i o n ~ y e a r s ~ o l d . ~$ |  |

The dates are between 5,450 and 8,186 million years old. The average age is 6,320 million years old. Table 3 in the original article ${ }^{28}$ has dates older than the universe and extreme discordance with up to 2 million percent. The average discordance is 212,000 perecent!

## 40Ar/39Ar and U-Th-Pb Dating

This meteorite sample ${ }^{29}$ was dated in 1983 by Donald Bogard from the Johnson Space Center, Houston Texas. If we look in Table 5 in the original article we see that there are dates beside the ${ }^{207} \mathrm{~Pb} /{ }^{208} \mathrm{~Pb}$ ratios no dates beside the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios. If we run the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios through Isoplot we see that they uniformly differ with the ${ }^{207} \mathrm{~Pb} /{ }^{208} \mathrm{~Pb}$ dates given in the essay. The author's choice to drop these dates and only have dates beside the ${ }^{207} \mathrm{~Pb} /{ }^{208} \mathrm{~Pb}$ ratios is just an arbitrary choice.

Table 16

| Age | Age | Age |
| :---: | :---: | :---: |
| Pb-207/208 | Pb-207/206 | Category |
| 4,560 | 5,370 | Older Than Solar System |
| 4,720 | 5,364 | Older Than Solar System |
| 4,560 | 5,364 | Older Than Solar System |
| 4,450 | 5,283 | Older Than Solar System |
| 4,700 | 5,371 | Older Than Solar System |
| 4,540 | 5,367 | Older Than Solar System |
| 4,410 | 5,082 | Older Than Solar System |
| 4,560 | 5,368 | Older Than Solar System |
| 4,700 | 5,367 | Older Than Solar System |
| 4,500 | 5,333 | Older Than Solar System |

## Isotopic Lead Investigations

These meteorite samples were dated in 1975 by the Department of Geological Sciences, University of California, Santa Barbara, California. ${ }^{31}$ From Table 2 in the original article we can calculate the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios and then we run them through Isoplot. The ages are consistently older than the age of the Solar System.

Table 17

| Sample | Pb 206/207 | Age |
| :---: | :---: | :---: |
| Name | Ages | Category |
| $7-1$ | 5,175 | Older Than Solar System |
| $7-2$ | 5,300 | Older Than Solar System |
| $7-3$ | 5,287 | Older Than Solar System |
| $7-4$ | 5,346 | Older Than Solar System |
| $4-1$ | 5,337 | Older Than Solar System |
| W-2 | 5,342 | Older Than Solar System |
| Allende-1 | 5,297 | Older Than Solar System |
| Allende-2 | 5,326 | Older Than Solar System |
| Allende | 5,262 | Older Than Solar System |
| 9-1 | 5,324 | Older Than Solar System |
| M-2 | 5,322 | Older Than Solar System |
| 9-3 | 5,339 | Older Than Solar System |
| 9-4 | 5,334 | Older Than Solar System |
| ChL-1 (IC) | 5,138 | Older Than Solar System |
| ChL-1 (ID) | 5,137 | Older Than Solar System |
| Ch3 (IC) | 5,220 | Older Than Solar System |
| Ch3 (ID) | 5,227 | Older Than Solar System |
| ChD (IC) | 5,103 | Older Than Solar System |
| ChD (ID) | 5,099 | Older Than Solar System |

## Conclusion

Prominent evolutionist Brent Dalrymple states:
"Several events in the formation of the Solar System can be dated with considerable precision." ${ }^{33}$
Looking at some of the dating it is obvious that precision is much lacking. He then goes on:
"Biblical chronologies are historically important, but their credibility began to erode in the eighteenth and nineteenth centuries when it became apparent to some that it would be more profitable to seek a realistic age for the Earth through observation of nature than through a literal interpretation of parables." ${ }^{34}$

The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary.

## http://creation.com/radiometric-dating-questions-and-answers

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## www.creation.com

# Rocks With Future Dates <br> By Paul Nethercott <br> May 2013 

## Introduction

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." ${ }^{4}$ "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

Evolutionists give the age of the galaxy as " 11 to 13 billion years for the age of the Milky Way Galaxy." ${ }^{1,7}$ Let us remember this as we look at the following dating as given in secular science journals.

## Norwegian Caledonides: An Isotopic Investigation

These rocks from Norway were dated ${ }^{8}$ in 2009 using the Rubidium/Strontium and Neodymium/Samarium method. The rock samples gave ages ${ }^{9}$ between -31 and 76 billion years old! Since the Earth exists in the present how can rocks have formed in the future? How can a rock be 60 billion years older than the Big Bang explosion?
"Re/Os model ages determined by LA-ICPMS from $\mathrm{Fe}-\mathrm{Ni}$ sulfides (primarily pentlandite) scatter across the entire history of the Earth, and a few give meaningless future ages or ages older than the Earth." ${ }^{10}$
"The model ages show enormous scatter both within and between bodies and range from meaningless future dates to equally meaningless dates older than the Earth." ${ }^{11}$

Of all the samples 20 are older than the Earth, 8 are older than the Galaxy, 7 are older than the Universe and 19 have negative ages. ${ }^{9}$ There is a 96,557 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.

Table 1

|  | Million Years | Million Years |
| :---: | :---: | :---: |
| Average | $\mathbf{4 , 1 2 3}$ | $\mathbf{2 , 5 7 0}$ |
| Maximum | $\mathbf{7 6 , 5 2 3}$ | $\mathbf{6 4 , 5 7 7}$ |
| Minimum | $\mathbf{- 2 0 , 0 3 4}$ | $\mathbf{- 3 1 , 0 7 1}$ |

Table 2

| Million Years | Million Years |
| :---: | :---: |
| $-20,034$ | $-31,071$ |
| $-7,491$ | $-2,394$ |
| $-6,102$ | $-2,104$ |
| $-2,184$ | -546 |

## Multi-stage Origin of Roberts Victor Eclogites

These rocks from South Africa were dated ${ }^{12}$ in 2011 using the Rubidium/Strontium and Neodymium/Samarium method. The rock samples gave ages ${ }^{13}$ between -22 and 20 billion years old! Since the Earth exists in the present how can rocks have formed in the future? How can a rock be 5 billion years older than the Big Bang explosion?

The author admits that the dates are impossible: "Type I eclogites show wide variations in model ages, from negative values to values much larger than the age of Earth. Sr model ages of Type I samples are all negative. Nd TCHUR ranges from -22.4 to 6.6 Ga , and Nd TDM from -2.3 to 8.1 Ga . Most of the Hf data give future ages; RV07-03, -18 and HRV247 give reasonable model ages, but the model ages of RV07-16 are older than Earth itself." ${ }^{13}$

Table 3

| Billion Years | Billion Years | Billion Years | Billion Years |
| :---: | :---: | :---: | :---: |
| -22.42 | -7 | -1.51 | 6.63 |
| -12.34 | -5.51 | 5.07 | 7.66 |
| -11.44 | -2.64 | 5.41 | 8.1 |
| -10.02 | -2.51 | 6.27 | 18.17 |
| -9.9 | -2.29 | 6.36 | 19.31 |
| -7.15 | -2.04 | 6.57 | 19.87 |

There is a 42,290 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.

## Re-Os Systematics of Mantle Xenoliths

These rocks from Tanzania were dated ${ }^{14}$ in 1999 using the Rubidium/Strontium and Neodymium/Samarium method. The rock samples gave ages ${ }^{15}$ between 2.7 billion years old to seven future ages! Since the Earth exists in the present how can rocks have formed in the future? The author admits this in two different places:
"Corresponding to Re depletion (TRD) model ages of 2.8 Ga to the future, respectively" ${ }^{15}$
"Collectively, the deep samples have more radiogenic Os isotopic compositions, corresponding to TRD ages that range from 1 Ga to the future." ${ }^{16}$

## Re/Os Isotopes of Sulfides

These rocks from eastern China were dated ${ }^{17}$ in 2006 using the Rhenium/Osmium method. The rock samples gave ages ${ }^{18}$ between 40 billion to -87 billion years! Since the Earth exists in the present how can rocks have formed in the future? How can a rock be 70 billion years older than the Big Bang explosion? The author admits this major problem in four different places:
"Widespread Mesozoic magmatism in the Cathaysia block may be represented by abundant mantle sulfides with mildly superchondritic $1870 \mathrm{O} / 1880$ s and 'future' model ages." ${ }^{19}$
"Many of the peridotites studied here contain several generations of sulfides, spanning from Archean to 'future' model ages." ${ }^{20}$
"Samples with higher Re/Os may give 'future' ages, or ages older than Earth." ${ }^{20}$
"However, TMA calculations may yield both future ages and ages older than the Earth, because Re may be added to, or removed from, a xenolith by processes in the mantle and in the host basalt." ${ }^{21}$

In table 4 we can see the minimum ages, and in table 5 the maximum ages. There is 127 billion year difference between the oldest [ 39 billion years] and the youngest [ -87 billion years]. If the universe is only 13 billion years old how can there be such a wide range of ages?

Table 4

| Million Years | Million Years | Million Years |
| :---: | :---: | :---: |
| $-87,817$ | $-10,838$ | $-3,503$ |
| $-47,693$ | $-10,501$ | $-3,031$ |
| $-27,938$ | $-7,384$ | $-2,902$ |
| $-16,952$ | $-6,558$ | $-2,814$ |
| $-15,940$ | $-5,892$ | $-2,741$ |
| $-12,854$ | $-3,773$ | $-2,552$ |

Table 5

| Million Years | Million Years | Million Years | Million Years |
| :---: | :---: | :---: | :---: |
| $\mathbf{6 , 0 0 1}$ | $\mathbf{6 , 5 1 9}$ | $\mathbf{9 , 4 4 9}$ | $\mathbf{2 0 , 0 7 3}$ |
| $\mathbf{6 , 0 8 8}$ | $\mathbf{6 , 7 3 6}$ | $\mathbf{1 0 , 3 8 2}$ | $\mathbf{2 2 , 6 6 4}$ |
| $\mathbf{6 , 1 0 6}$ | $\mathbf{7 , 4 4 1}$ | $\mathbf{1 0 , 7 0 1}$ | $\mathbf{2 4 , 6 7 7}$ |
| $\mathbf{6 , 4 2 8}$ | $\mathbf{8 , 0 4 4}$ | $\mathbf{1 0 , 7 3 6}$ | $\mathbf{3 4 , 3 2 9}$ |
| $\mathbf{6 , 4 7 0}$ | $\mathbf{8 , 8 6 2}$ | $\mathbf{1 8 , 6 0 6}$ | $\mathbf{3 9 , 2 2 9}$ |

There is a 127,046 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. The values in table 6 are taken from figure 4 in Xisheng Xu's article. ${ }^{21}$ There is 16 billion year difference between the oldest [ 9 billion years] and the youngest [ -6 billion years]. If the universe is only 13 billion years old how can there be such a wide range of ages?

Table 6

|  | Cathaysia Block | Yangtze Block | Sino-Korean Block | Xing-Meng Block |
| :---: | :---: | :---: | :---: | :---: |
| Maximum | $\mathbf{9 , 4 6 4}$ | $\mathbf{8 , 8 8 9}$ | $\mathbf{6 , 4 3 7}$ | $\mathbf{7 , 3 9 5}$ |
| Minimum | $-6,574$ | $-3,752$ | $-2,824$ | $-2,061$ |
| Average | -75 | 340 | 440 | $\mathbf{7 2 0}$ |

## Lu-Hf Geochronology

These granulite xenoliths from the Kilboume Hole, New Mexico, ${ }^{22}$ have been dated in 1997 using the Lu-Hf isotope system. The author admits that impossible dates have been generated: "The Nd isotope model ages presented in Table 3 are generally negative for the garnet granulites. A future age, or one that is older than the actual differentiation event, represents a rotation of a sample's apparent Nd isotope evolution curve, caused by increasing the $\mathrm{Sm} / \mathrm{Nd}$ ratio at some time in the past." ${ }^{23}$

The values in table 7 contain numerous negative ages. ${ }^{24}$ One sample (CKH63) has dates that vary from -3,297 to 2,478 million years old. That means a 5.7 billion year difference. Earth rocks can only be 4.5 billion years old so how can there be such a wide variation?

Table 7

| Million Years |
| :---: |
| $-3,297$ |
| $-1,051$ |
| -659 |
| -514 |

Table 8

| Sample | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $207 \mathrm{~Pb} / 235 \mathrm{U}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ |
| :---: | :---: | :---: | :---: |
| 63 a | 426 | 611 | 1371 |
| 63 d | 317 | 490 | 1410 |
| 63 e | 98 | 161 | 1238 |
| 63 j | 430 | 622 | 1402 |
| 63 g | 136 | 242 | 1457 |
| 63 b | 319 | 483 | 1362 |
| 63 c | 425 | 624 | 1429 |

The Uranium/Lead dates ${ }^{25}$ listed in table 8 shows that there is major discordance between various methods. Sample 63 e has a $1260 \%$ difference in ages. The author's choice of 'true age' is arbitrary.

## Isotopic Disequilibrium

These mineral samples from Mono Lake, California and Seram, Indonesia ${ }^{26}$ have been dated in 1998 using the $\mathrm{Rb} / \mathrm{Sr}$ and $\mathrm{Pb} / \mathrm{U}$ isotope systems. These mineral samples from Mono Lake, California are supposed to be 11.9 million years old: "The HIGH glasses are all less radiogenic than the source granite at 11.9 Ma . Within the HIGH glasses there is a general positive correlation between $87 \mathrm{Sr} / 86 \mathrm{Sr}(11.9 \mathrm{Ma})$ and $\mathrm{Rb} / \mathrm{Sr}$." ${ }^{27}$ If we run the isotopic ratios ${ }^{28}$ listed in table 2 in the article through Isoplot ${ }^{29}$ we get dates from 3,913 to 11,500 million years old! That means they are between 328 and 966 times too old!

These mineral samples from Seram, Indonesia are supposed to be 5.5 million years old: "The most precise muscovite and biotite $\mathrm{Ar} / \mathrm{Ar}$ ages obtained from the complex 5.90 Ma and 5.51 Ma , respectively." ${ }^{30}$ If we run the isotopic ratios listed in table $4^{31}$ in the article through Isoplot ${ }^{30}$ we get dates from 4,980 to 11,660 million years old! That means they are between 906 and 2,120 times too old!
"In contrast, the plagioclase from the leucosome and the three matrix samples from the melanosome of BK 21B yield 'future ages' from -11 and $-15 \mathrm{Ma} .{ }^{32}$ There is a 11,516 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.

Table 9

| Table 2 | Table 2 | Table 4 | Table 4 | Table 5 |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{8 7 R b} / 86 \mathrm{Sr}$ |
| $\mathbf{5 , 9 0 2}$ | $\mathbf{3 , 9 1 4}$ | $\mathbf{4 , 4 9 3}$ | $\mathbf{4 , 9 8 2}$ | $\mathbf{- 1 4 . 7}$ |
| $\mathbf{5 , 9 7 6}$ | $\mathbf{3 , 9 1 4}$ | $\mathbf{1 0 , 8 2 2}$ | $\mathbf{4 , 9 8 5}$ | $\mathbf{- 1 3 . 3}$ |
| $\mathbf{6 , 4 0 3}$ | $\mathbf{3 , 9 1 3}$ | $\mathbf{9 , 7 2 8}$ | $\mathbf{4 , 9 8 4}$ | $\mathbf{- 1 1}$ |
| $\mathbf{6 , 1 5 7}$ | $\mathbf{3 , 9 1 3}$ | $\mathbf{1 1 , 2 1 6}$ | $\mathbf{4 , 9 8 0}$ | 4.79 |
| $\mathbf{7 , 8 0 1}$ | $\mathbf{3 , 9 1 4}$ | $\mathbf{1 0 , 9 8 0}$ | $\mathbf{4 , 9 8 2}$ | $\mathbf{1 2}$ |
| $\mathbf{8 , 0 0 6}$ | $\mathbf{3 , 9 1 3}$ | $\mathbf{1 1 , 6 6 0}$ | $\mathbf{4 , 9 8 2}$ | $\mathbf{3 1 . 4}$ |
| $\mathbf{8 , 3 2 0}$ | $\mathbf{3 , 9 1 9}$ | $\mathbf{7 , 1 3 3}$ | $\mathbf{4 , 9 8 1}$ | $\mathbf{3 2 . 2}$ |
| $\mathbf{8 , 5 2 2}$ | $\mathbf{3 , 9 1 6}$ | $\mathbf{1 0 , 1 6 8}$ | $\mathbf{4 , 9 8 2}$ | $\mathbf{3 3 . 9}$ |
| $\mathbf{8 , 7 2 6}$ | $\mathbf{3 , 9 1 7}$ | $\mathbf{1 0 , 2 3 5}$ | $\mathbf{5 , 0 4 1}$ | $\mathbf{4 4}$ |
| $\mathbf{8 , 3 6 8}$ | $\mathbf{3 , 9 2 0}$ | $\mathbf{8 , 1 6 7}$ | $\mathbf{5 , 0 3 1}$ | $\mathbf{6 5 . 2}$ |
| $\mathbf{1 1 , 5 0 1}$ | $\mathbf{3 , 9 2 0}$ |  |  | $\mathbf{7 9}$ |

## Multiple Metasomatic Events

These mineral samples from the Labait volcano, north-central Tanzania ${ }^{33}$ have been dated in 2008 using the $\mathrm{Rb} / \mathrm{Sr}$ and $\mathrm{Sm} / \mathrm{Nd}$ isotope systems. The author admits that the dates give several negative ages:
"These deeper more fertile peridotites yield younger Re/Os ages ( 1 Ga to future ages) and represent either mixtures of ancient lithosphere with the underlying asthenosphere or recent additions to the base of the lithosphere." ${ }^{34}$ There is a 4,205 million year spread ${ }^{35}$ of dates between the youngest [Negative] and the oldest [Positive] ages.

Table 10

| Million Years |
| :---: |
| 2,013 |
| $-2,192$ |
| $-1,115$ |
| -573 |

## Re-Os Evidence

These mineral samples from central eastern China, ${ }^{36}$ have been dated in 2006 using the Re/Os isotope systems. The author admits that the dates give several negative ages: "Ages ( $-6,900$ to $7,330 \mathrm{Ma}$ ) of the Raobozhai peridotites vary widely from geologically meaningless to future ages." ${ }^{37}$ The dating gave four impossible future ages. ${ }^{38}$ According to Re/Os isochron diagrams ${ }^{39}$ for Xugou peridotites, the formation is 2,000 million years old. There is a 14,230 million year spread_of dates between the youngest [Negative] and the oldest [Positive] ages.

## Central Asian Orogenic Belt

These mineral samples from north eastern China, ${ }^{40}$ have been dated in 2010 using the Re/Os isotope systems.
According to $\mathrm{Re} / \mathrm{Os}$ isochron dates ${ }^{41}$ the formation is 2,000 million years old. The author admits that the dates give several negative ages: "Other samples give TMA either older than the age of the Earth or a future age, suggesting a disturbance of the Re-Os isotope system in these samples." ${ }^{42}$ There is a 23,920 million year spread 43 of dates between the youngest [Negative] and the oldest [Positive] ages.

Table 11

| Billion Years |
| :---: |
| -9.27 |
| -3.83 |
| 5.91 |
| 10.62 |
| 14.65 |

## The Mamonia Complex, Cyprus

These mineral samples from Mamonia complex, Cyprus, ${ }^{44}$ have been dated in 2008 using the Re/Os isotope systems. According to Re/Os isochron dates ${ }^{44}$ the formation is from three age clusters at $250 \mathrm{Ma}, 600-800 \mathrm{Ma}$ and $1,000 \mathrm{Ma}$. Four ${ }^{45}$ of the thirty dates had future ages. This is a serious issue of having so many impossible dates:
"The minimum ages of the Mamonia spinel peridotites varies from negative (future age) to 1150 Ma ." ${ }^{46}$
"The calculation of the ages of the melting event (depletion in Re) gives inconclusive results varying from future ages to $>1000 \mathrm{Ma}$." ${ }^{47}$

## A Paleozoic Convergent Plate

These mineral samples from Austria, ${ }^{48}$ have been dated in 2004 using the Re/Os isotope systems. Even though the Earth is supposed to be only 4.5 billion years old some dates are twice as old: "Rhenium-Osmium model ages range between future ages and $9.1 \mathrm{Ga} .{ }^{"}{ }^{49}$ If we enter the isotopic ratios ${ }^{50}$ into Microsoft Excel and use the standard mathematical formula ${ }^{51}$ we find that the dates are between 100 and 2,500 percent in error.

$$
\begin{gathered}
t=\frac{2.303}{\lambda} \log \left(\frac{(187 O s / 188 O s)-(187 O s / 188 O s)_{0}}{(187 \operatorname{Re} / 188 O s)}+1\right) \\
\lambda=\frac{0.693}{h} \\
\hline
\end{gathered}
$$

$\mathrm{h}=$ half life 41.6 billion years
$t=$ the rocks age in years
Table 12

| Age | T ch Age | Age | Age Ratio |
| :---: | :---: | :---: | :---: |
| Million Years | Billion Years | Difference | Percentage |
| 352 | -4,300 | 4,652 | 1,221 |
| 376 | -500 | 876 | 133 |
| 349 | 1,900 | 2,249 | 545 |
| 352 | 8,800 | 9,152 | 2,500 |
| 356 | 9,100 | 9,456 | 2,559 |
| 357 | 6,200 | 6,557 | 1,739 |
| 350 | 400 | 750 | 114 |
| 354 | 1,300 | 1,654 | 368 |
| 350 | 1,200 | 1,550 | 343 |
| 355 | 3,300 | 3,655 | 930 |
| 350 | 1,100 | 1,450 | 314 |
| 351 | 2,100 | 2,451 | 598 |
| 350 | 4,300 | 4,650 | 1,230 |

There is a 13,400 million year spread ${ }^{50}$ of dates between the youngest [Negative] and the oldest [Positive] ages.

## Northern Canadian Cordillera Xenoliths

These mineral samples from Northern Canada, ${ }^{51}$ have been dated in 1999 using the Re/Os isotope systems. According to $\mathrm{Re} / \mathrm{Os}$ isochron dates ${ }^{52}$ the formation's true age is 1.64 billion years old. Many of the dates were impossible future ages: "The decoupling of $187 \mathrm{Re} / 188 \mathrm{Os}$ and $187 \mathrm{Os} / 1880 \mathrm{O}$ observed in the Canadian Cordillera xenolith data also affects the calculation of Os model ages, and leads to 'future' ages or ages older than the Earth." ${ }^{52}$ Of the forty one dates, fifteen [37\%] were negative ages. ${ }^{53}$

## Xenoliths From Yangyuan and Fansi

These mineral samples from North China Craton, ${ }^{55}$ have been dated in 2007 using the Re/Os isotope systems. According to Re/Os isochron dates ${ }^{55}$ the formation's true age is 2.6 billion years old. Many of the dates were impossible future ages: "Nd model ages range from future ages to older than that of the Earth." ${ }^{56}$ If we look at the dating table in the article, there is a 20,500 million year spread ${ }^{57}$ of dates between the youngest [Negative] and the oldest [Positive] ages.

Table 13

| Billion Years |  |
| :---: | :---: |
| -10.8 | Billion Years |
| -3.5 | -0.53 |
| 9.7 | -0.31 |

## Formation of the North Atlantic Craton

These mineral samples from west Greenland, ${ }^{58}$ have been dated in 2010 using the $\mathrm{Re} / \mathrm{Os}$ isotope systems. According to $\mathrm{Re} / \mathrm{Os}$ isochron dates ${ }^{58}$ the formation's true age is 2.0 to 3.0 billion years old. Many of the dates were impossible future ages:
"The WG-NAC peridotites, unsurprisingly, yield a substantial number of TMa model ages that are older than the earliest solids in the solar system or Earth ( $16 \%$ ) or result in future ages $(15 \%)$. This means that a third of the samples investigated here do not provide realistic TMa mantle melting ages. Os isotope data acquired by laser ablation measurements of sulphides in peridotites typically lack precise $\mathrm{Re} / \mathrm{Os}$ data, and also yield a high proportion of samples with extremely scattered and unrealistic TMa mantle melting ages that range from future ages to those exceeding the age of the Earth." ${ }^{59}$
"These Os isotope systematics yield equally diverse TRD model ages ranging from Paleoarchean in individual samples to future ages." ${ }^{59}$

There is a $\underline{\mathbf{2 1}, \mathbf{2 5 2}}$ million year spread of dates ${ }^{60}$ between the youngest [Negative] and the oldest [Positive] ages. The data in tables 14 and 15 correspond to tables 1 and 2 in the original article.

Table 14

| Million Years |
| :---: |
| 5,872 |
| 5,485 |
| 4,845 |
| -552 |

Table 15

| Million Years | Million Years |
| :---: | :---: |
| $-14,258$ | 5,571 |
| $-14,258$ | 5,643 |
| $-14,209$ | 5,793 |
| $-1,066$ | 6,950 |
| 4,788 | 6,994 |
| 5,325 | 6,994 |

## In Situ Measurement of Re-Os Isotopes

These mineral samples from the Siberian and Slave Cratons, and the Massif Central, France, ${ }^{61}$ have been dated in 2010 using the Re/Os isotope systems. According to Re/Os isochron dates ${ }^{\mathbf{6 2}}$ the formation's true age is 2.3 to 3.6 billion years old. Many of the dates were impossible future ages: "Therefore, both TRD and TMA yield unrealistic ages (future or unreasonably old, respectively)." 63

Table 16

| Billion Years | Billion Years |
| :---: | :---: |
| -1.89 | -7.12 |
| -1.3 | -3.54 |
| -1.2 | -1.99 |
| 3.52 | 7.69 |
| 5.41 | 14.81 |

If we look at table 16 we see the bottom row has the difference between the oldest and youngest dates ${ }^{64}$ in the original article.

## Conclusion

Prominent evolutionist Brent Dalrymple states: "Several events in the formation of the Solar System can be dated with considerable precision." ${ }^{65}$

Looking at some of the dating it is obvious that precision is much lacking. He then goes on: "Biblical chronologies are historically important, but their credibility began to erode in the eighteenth and nineteenth centuries when it became apparent to some that it would be more profitable to seek a realistic age for the Earth through observation of nature than through a literal interpretation of parables." ${ }^{66}$

The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary.

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# Impossible Radiometric Dates 

By Paul Nethercott
April 2013
Introduction
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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

Evolutionists give the age of the galaxy as " 11 to 13 billion years for the age of the Milky Way Galaxy." ${ }^{1,7}$ Let us remember this as we look at the following dating as given in secular science journals.

## Evolution Beneath the Kaapvaal Craton

These rocks from South Africa were dated ${ }^{8}$ in 2004 using the Rhenium/Osmium dating method. The rock samples gave ages ${ }^{9}$ between - 279 and 79 billion years old! There is a 358,000 million year ${ }^{9}$ spread of dates between the youngest [Negative] and the oldest [Positive] ages. Of the 374 dates, 92 [25\%] are negative. The author admits in several places that many ages are impossibly old or young:
"In some cases these define plausible ages (Fig. 8a) but in most the 'ages' are greater than the age of the Earth (Fig. 8b), and all of these correlations are regarded as mixing lines." ${ }^{10}$
"Both types of high-Fe samples have high proportions of sulfides with young to negative TRD ages." ${ }^{11}$
"Negative model ages are meaningless numbers, and are plotted at increments of .0 .1 Ga to illustrate the relative abundance of sulfides." ${ }^{11}$

Table 1

| Average | -5 | 3 |
| :---: | :---: | :---: |
| Maximum | 5 | 79 |
| Minimum | -279 | -124 |

Table 2

| Age Type | Amount | Percent |
| :---: | :---: | :---: |
| Negative Ages | 92 | 24.59 |
| Older Than The Earth | 35 | 9.35 |
| Older Than The Galaxy | 11 | 2.94 |
| Older Than The Universe | 8 | 2.13 |

## Central Asian Orogenic Belt

These rocks from Northern China were dated ${ }^{12}$ in 2010 using the Rhenium/Osmium dating method. The rock samples in table 2 in the article gave ages ${ }^{13}$ between -9 and 14 billion years old! There is a 14,450 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. The rock samples in table 3 in the article gave ages ${ }^{14}$ between -3.8 and 10.6 billion years old! There is a 23,920 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. The author admits in several places that many ages are impossibly old or young:
"Whereas two samples give model ages close to, or even greater than, the age of the Earth." ${ }^{15}$

## Impossible Radiometric Dates

"Other samples give TMA either older than the age of the Earth or a future age, suggesting a disturbance of the $\mathrm{Re}-\mathrm{Os}$ isotope system in these samples." ${ }^{13}$
"Thirteen Keluo mantle xenoliths yield impossible TMA model ages, i.e., negative or greater than the Earth's age, reflecting the modification of Re/Os ratios shortly before, during or since basalt entrainment." ${ }^{16}$

Table 3

|  | 187Re/188Os | 187Re/188Os |
| :---: | :---: | :---: |
|  | Billion Years | Billion Years |
| Average | 0.94 | 0.86 |
| Maximum | 2.09 | 10.62 |
| Minimum | -0.33 | -3.83 |

Table 4

|  | $147 \mathrm{Sm} / 144 \mathrm{Nd}$ | 176Lu/177Hf |
| :---: | :---: | :---: |
|  | Billion Years | Billion Years |
| Average | 2.06 | 0.73 |
| Maximum | 5.91 | 14.65 |
| Minimum | 0.49 | -9.27 |

If we use the Rhenium/Osmium dating formula shown in Gunter Faure's book ${ }^{17}$ and enter a set of isotopic ratios listed in the original online article ${ }^{18}$ we find the rock formation is less than 500 thousand years old.

$$
\begin{gathered}
t=\frac{2.303}{\lambda} \log \left(\frac{(187 O s / 188 O s)-(187 O s / 188 O s)_{0}}{(187 \mathrm{Re} / 188 O s)}+1\right) \\
\lambda=\frac{0.693}{h}
\end{gathered}
$$

$\mathrm{h}=$ half life, 41.6 billion years
$t=$ the rocks age in years

## Norwegian Caledonides

These rocks from western Norway were dated ${ }^{19}$ in 2009 using the Samarium/Neodymium dating method. The rock samples in the article gave ages ${ }^{20}$ between -64 and 76 billion years old! There is a 141,100 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. The author admits in several places that many ages are impossibly old or young:
"Re-Os model ages determined by LA-ICPMS from $\mathrm{Fe}-\mathrm{Ni}$ sulfides (primarily pentlandite) scatter across the entire history of the Earth, and a few give meaningless future ages or ages older than the Earth." ${ }^{21}$
"Table 2 lists model ages based on primitive (CHUR) and depleted (DM) mantle models. The model ages show enormous scatter both within and between bodies and range from meaningless future dates to equally meaningless dates older than the Earth." 22
"These filters eliminate most of the negative dates and leave only three apparent ages older than the Earth." ${ }^{22}$

Table 5

|  | Million Years | Million Years |
| :---: | :---: | :---: |
| Average | $\mathbf{4 , 5 1 0}$ | $\mathbf{1 , 4 0 0}$ |
| Maximum | $\mathbf{7 6 , 5 2 3}$ | $\mathbf{4 0 , 3 8 4}$ |
| Minimum | $-\mathbf{7 , 4 9 1}$ | $\mathbf{- 6 4 , 5 7 7}$ |

## Re-Os Isotopes of Sulfides

These rocks from eastern China were dated ${ }^{23}$ in 2007 using the Rhenium/Osmium dating method. The rock samples in the article gave ages ${ }^{24}$ between -47 and 39 billion years old! There is an 86,900 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. Out of the 348 dates, 72 ( $21 \%$ ) were negative and $19(5 \%)$ were older than the evolutionist age of the Earth. The author admits in several places that many ages are impossibly old or young:
"Re/Os versus TMA and TRD model ages, showing how samples with higher Re/Os may give 'future' ages, or ages older than Earth." ${ }^{25}$
"Many of the peridotites studied here contain several generations of sulfides, spanning from Archean to 'future' model ages." ${ }^{25}$
"However, TMA calculations may yield both future ages and ages older than the Earth, because Re may be added to, or removed from, a xenolith by processes in the mantle and in the host basalt." ${ }^{26}$
"A plot of TRD model ages that includes the "future" ages required by sulfides with super chondritic 187Os/188Os shows a marked peak at -180 Ma for the samples from the Cathaysia block." ${ }^{27}$

Table 6

| Table 6 |  |  |
| :---: | :---: | :---: |
|  | Million Years | Million Years |
| Average | $\mathbf{4 6 2}$ | $\mathbf{1 , 3 6 9}$ |
| Maximum | $\mathbf{4 , 4 6 1}$ | $\mathbf{3 9 , 2 2 9}$ |
| Minimum | $-6,558$ | $-47,693$ |

## Archean Man Shield, West Africa

These rocks from Sierra Leone were dated ${ }^{28}$ in 2001 using the Rhenium/Osmium and Uranium/Lead dating method. The Uranium/Lead dating system gave an average age ${ }^{29}$ of 2.5 billion years. The Rhenium/Osmium dating system gave an average age ${ }^{30}$ of 8 billion years. The rock samples in the article gave ages ${ }^{30}$ between 1.2 and 77 billion years old! There is a 76,000 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. The author admits in several places that many ages are impossibly old or young:
"For the high MgO samples, more than half of the $\mathrm{Re} / \mathrm{Os}$ model ages are older than the age of the Earth, indicating they either experienced recent Re loss or gain of radiogenic Os." ${ }^{31}$
"Five out of 13 of the low MgO samples also have Re/Os model ages older than the Earth." 31

Table 7

| Statistics | Re/Os | 206Pb/238U | $207 \mathrm{~Pb} / 235 \mathrm{U}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | 8,092 | 2,367 | 2,649 | 2,910 |
| Maximum | 77,160 | 3,185 | 3,412 | 3,562 |
| Minimum | 1,390 | 1,204 | 1,873 | $\mathbf{2 , 7 4 3}$ |

## Lithospheric Mantle Evolution

These rocks from north Queensland were dated ${ }^{32}$ in 2010 using the Rhenium/Osmium dating method. The rock samples in the article gave ages ${ }^{33}$ between -24 and 8.6 billion years old! There is a 33,330 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. Out of the 54 dates, 13 (24\%) were negative and two were older than the evolutionist age of the Earth. The author admits that many ages are impossibly old or young:
"Sulfides deposited from fluids with variable $\mathrm{Re} / \mathrm{Os}$ have Os-isotope compositions that either plot in the field with $\gamma \mathrm{Os}>0$ and $\mathrm{Re} / \mathrm{Os}>\mathrm{CHUR}$, and with negative TRD and TMA ages or they plot in the field with $\gamma \mathrm{Os}>0$ and $\mathrm{Re} / \mathrm{Os}>\mathrm{CHUR}$, and with negative TMA and positive TRD ages." ${ }^{34}$

Table 8

|  | $\underline{c}$ Billion Years | Billion Years |
| :---: | :---: | :---: |
| Average | -0.44 | 0.93 |
| Maximum | 8.62 | 3.36 |
| Minimum | -24.71 | -1.75 |

## Upper Crust in North-East Australia

These rocks from north Queensland were dated ${ }^{35}$ in 2010 using the Rhenium/Osmium dating method. The rock samples in the article gave ages ${ }^{36}$ between -3.2 and 9.7 billion years old! There is a 12,950 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. Out of the 31 dates, 6 (20\%) were negative and one was older than the evolutionist age of the Earth. The author admits that many ages are impossibly old or young:
"Some garnet-rich granulites from the McBride Province yielded negative Hf and Nd model ages, whereas the Mt Quincan granulite yields model ages both older than the Earth and negative; these are not useful and are rejected." ${ }^{37}$

Table 9

| 1able 9 |  |  |
| :---: | :---: | :---: |
| Average | 2.01 | 1.50 |
| Maximum | 9.73 | 3.97 |
| Minimum | -0.80 | -3.22 |

## The Kaapvaal Cratonic Lithospheric Mantle

These rocks from South Africa were dated ${ }^{38}$ in 2006 using the Samarium/Neodymium and Lutetium/Hafnium dating methods. The rock samples in the first table [Table 10] in the article gave ages ${ }^{39}$ between - 67 and 30 billion years old! There is a 97,790 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. Out of the 57 dates, $17(30 \%)$ were negative and four were older than the evolutionist age of the Earth. The author admits that many ages are impossibly old or young:
"The large difference in $\mathrm{Sm} / \mathrm{Nd}$, but the relatively similar Nd isotope compositions of the garnet and cpx from the same sample result in generally young two-point cpx garnet $\mathrm{Sm} / \mathrm{Nd}$ 'ages' for the Kimberley samples ranging from negative to 202 Ma ." ${ }^{40}$
"Evidence that complete equilibration was not achieved in many of the samples comes from the observation that tie-lines connecting the garnet and $\mathrm{Sm} / \mathrm{Nd}$ data for seven samples provide ages younger than the time of kimberlite eruption, including a number of samples that give negative ages." ${ }^{41}$
"Negative $\mathrm{Sm} / \mathrm{Nd}$ garnet ages are not uncommon for peridotite xenoliths and were first described in samples from Kimberley." 41

Table 10

| Minimum | Maximum |
| :---: | :---: |
| -67.49 | 4.85 |
| -8.15 | 25.46 |
| -2 | 30.3 |

If we put the Samarium/Neodymium and Lutetium/Hafnium ratios in first table ${ }^{39}$ in the article into Microsoft Excel and use the dating formulas ${ }^{\mathbf{4 2}, 43}$ listed in Gunter Faure's book we find that the average age is just 100 million years! The spread of dates is not 100 billion years but just 100 million years!

$$
t=\frac{2.303}{\lambda} \log \left(\frac{(143 N d / 144 N d)-(143 N d / 144 N d)_{0}}{(144 S m / 147 N d)}+1\right)
$$

$h=$ half life, 106 billion years

$$
t=\frac{2.303}{\lambda} \log \left(\frac{(176 H f / 177 H f)-(176 H f / 177 H f)_{0}}{(176 L u / 177 H f)}+1\right)
$$

$\mathrm{h}=$ half life, 37.3 billion years
Table 11

| Billion Years |
| :---: |
| 0.6 |
| 12.2 |
| 14.5 |
| 21.8 |
| 34.6 |

If we look at the dates in table eleven ${ }^{44}$ there is a $\mathbf{3 4 , 0 0 0}$ million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. If we look at the dates in table twelve ${ }^{41}$ there is a $\mathbf{9 9 , 9 0 8}$ million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.

Table 12

| Statistical | Billion Years | Billion Years |
| :---: | :---: | :---: |
| Data | Sm-Nd | Lu-Hf |
| Minimum | $-2,247$ | $-2,377$ |
| Maximum | 96,661 | 1,995 |
| Difference | 98,908 | 4,372 |

## In Situ Analysis of Sulphides

These rocks from South Australia and France were dated ${ }^{45}$ in 2001 using the Rhenium/Osmium dating methods. The rock samples in the second table in the article gave ages ${ }^{46}$ between -17 and 34 billion years old! With the South Australian rocks, there is a 51,000 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. The author admits that many ages are impossibly old or young:
"It is obviously not the case here, given that TMA model ages for some sulphides or samples are unrealistic, giving future ages or ages older than $4.5 \mathrm{Ga} .{ }^{46}$
"Interstitial sulphides in GRM-2 yield future TRD ages and unrealistic TMA ages, again indicating that the Os isotopic composition is not related to time-integrated in situ Re decay." ${ }^{47}$

Table 12

| Billion Years | Billion Years |
| :---: | :---: |
| -17.4 | 4.35 |
| -9.5 | 5.2 |
| -7.06 | 8.3 |
| -2.35 | 8.8 |
| -0.3 | 34 |

South Australian rocks
Table 13

| Billion Years | Billion Years |
| :---: | :---: |
| -32 | 3.11 |
| -2.08 | 3.93 |
| -1.79 | 6.7 |
| -1.43 | 7.4 |
| -1.42 | 16 |

French rocks
With the French rocks, ${ }^{48}$ there is a 48,000 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.

## Southern African Peridotite Xenoliths

These rocks from South Africa were dated ${ }^{49}$ in 1988 using several dating methods. If we insert the isotopic ratios listed one table ${ }^{50}$ we find that the Rubidium/Strontium ratios give ages between 83 and between 1,100 million years old. If we insert the Lead/Lead ratios listed in the same table we find the rock is between 4,700 and 5,000 million years old. If we insert the Osmium ratios listed in another table ${ }^{51}$ and use the dating formula shown in Gunter Faure's book ${ }^{52}$ we find the rock is between $-3,300$ and 13,500 million years old. There is a $\mathbf{1 6 , 0 0 0}$ million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.

$$
t=\frac{1.04-\left({ }^{187} O s /{ }^{186} O s\right)}{0.050768}
$$

In the above formula, $\mathrm{t}=$ billions of years.
Table 14

| Dating | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| Summary | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ | $\mathbf{1 8 7 O s} / 1860 \mathrm{~s}$ | Neodymium | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ |
| Maximum | $\mathbf{1 , 1 0 0}$ | $\mathbf{1 3 , 5 5 1}$ | $\mathbf{1 , 6 3 0}$ | $\mathbf{5 , 0 6 4}$ |
| Minimum | $\mathbf{8 3}$ | $-\mathbf{3 , 3 0 9}$ | 520 | 4,700 |
| Difference | $\mathbf{1 , 0 1 7}$ | $\mathbf{1 6 , 8 6 0}$ | $\mathbf{1 , 1 1 0}$ | $\mathbf{3 6 4}$ |

## Xenoliths from Kimberley, South Africa

These rocks from South Africa were dated ${ }^{53}$ in 2007 using the Rhenium/Osmium dating method. The rock samples in the article gave ages ${ }^{54}$ between $-117,980$ and 143,830 million years old! With the rocks, there is a 261,810 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages. The author admits that many ages are impossibly old or young:

## Impossible Radiometric Dates

"The very old Re-Os model age of websterite DJ0217 of 7 Ga testifies to a more complex history for this sample." 55
"The olivines from these samples also provide negative Re-Os model ages suggesting recent modification of their Re-Os systematics." ${ }^{56}$
"On a Re-Os isochron diagram, the whole-rock-olivine tie-line for DJ0259 corresponds to an age of 5.2 Ga. This unrealistic age coupled with the radiogenic Os, but near chondritic Re/Os ratio of the olivine suggests that the olivine in this dunite was either added recently, or interacted extensively with modern mantle melts, for example the host kimberlite." ${ }^{56}$

Table 15

| Mineral | Average | Maximum | Minimum | Difference |
| :---: | :---: | :---: | :---: | :---: |
| Dunite | 970 | 3,250 | $-3,470$ | 6,720 |
| Dunite | 1,918 | 14,580 | $-15,020$ | 29,600 |
| Wehrlite | 2,375 | 3,190 | 900 | 3,100 |
| Wehrlite | 3,096 | 21,670 | $-11,150$ | 32,820 |
| Websterite | $-19,150$ | 3,050 | $-117,980$ | 121,030 |
| Websterite | 24,503 | 143,830 | 450 | 143,380 |

## Conclusion

Yuri Amelin states in the journal Elements that radiometric dating is extremely accurate:
"However, four 238U/235U-corrected CAI dates reported recently (Amelin et al. 2010; Connelly et al. 2012) show excellent agreement, with a total range for the ages of only 0.2 million years - from $4567.18 \pm 0.50 \mathrm{Ma}$ to $4567.38 \pm 0.31$ Ма." ${ }^{57-59}$

To come within 0.2 million years out of 4567.18 million years means an accuracy of $99.99562 \%$. Looking at some of the dating it is obvious that precision is much lacking. The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in radiometric dating is selectively taken to suit and ignores data to the contrary.

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Meteorite Dating<br>By Paul Nethercott<br>May 2012

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. ${ }^{\mathbf{1}}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{\mathbf{5}, \mathbf{6}}$

Evolutionists give the age of the galaxy as " 11 to 13 billion years for the age of the Milky Way Galaxy." ${ }^{1,7}$ Let us remember this as we look at the following dating as given in secular science journals.

## History Of The Acapulco Meteorite

This meteorite was dated in 1997 by scientists ${ }^{8}$ from France and Germany. Some of the dates ${ }^{9}$ are older than the Solar System. We shall soon see that this is quite common for dating these rocks.

Table 1

| Maximum Age | $\mathbf{1 1 , 4 2 1}$ | Million Years |
| :---: | :---: | :---: |
| Minimum Age | $\mathbf{3 , 4 8 1}$ | Million Years |
| Average Age | $\mathbf{4 , 9 6 4}$ | Million Years |
| Age Difference | $\mathbf{7 , 9 4 0}$ | Million Years |
| Difference | $\mathbf{3 2 8 \%}$ | Percent |
| Standard Deviation | $\mathbf{1 , 7 2 3}$ | Million Years |

## Potassium Argon Dating of Iron Meteorites

This article summarised meteorite dating in $1967 .{ }^{10}$ Even 40 years later things are no better. In the opening paragraph he states that the iron meteorite from Weekeroo Station is date at ten billion years old. He then continues: "The formation or solidification ages of iron meteorites have never been well determined." ${ }^{11}$ He then cites earlier dating which produced an age of seven billion years. ${ }^{12}$ The author concludes with the following remark: "The ages found by us are typical of the great ages found for most iron meteorites. From these, in conjunction with the Strontium: Rubidium data of Wasserburg et al. on silicate inclusions in this meteorite, we conclude that the potassium: argon dating technique as applied to iron meteorites gives unreliable results." ${ }^{13}$

Table 2

| Meteorite | Age |
| :---: | :---: |
| Sample | Billion Years |
| Neutron Activation | 10.0 |
| Stoenner and Zahringer | 7.0 |
| Muller and Ziihringer's | 6.3 |
| Wasserburg, Burnett | 4.7 |
| K-1 | 8.5 |
| K-2 | 9.3 |
| B-1 | 6.5 |
| G-1 | 10.4 |

## Pb Isotopic age of the Allende Chondrules

The meteorite was dated in 2007 using the ${ }^{206} \mathrm{~Pb} /{ }^{238} \mathrm{U}$ dating method. ${ }^{14}$ Over ten dates older than the age of the evolutionist age of the Solar System were produced and one was older [Ten Billion years] than the age of the galaxy. ${ }^{15}$

Table 3

| Maximum Age | $\mathbf{1 0 , 0 6 6}$ | Million Years |
| :---: | :---: | :---: |
| Minimum Age | $\mathbf{1 , 7 9 9}$ | Million Years |
| Average Age | $\mathbf{4 , 5 0 9}$ | Million Years |
| Age Difference | $\mathbf{8 , 2 6 7}$ | Million Years |
| Percentage Difference | $\mathbf{5 5 9 \%}$ | Percent |
| Standard Deviation | $\mathbf{1 , 6 4 0}$ | Million Years |

## Rhenium-187-Osmium-187 in Iron Meteorites

Scientists from France used both ${ }^{87} \mathrm{Sr} /{ }^{86} \mathrm{Sr}$ and Rhenium-Osmium method were used to date this meteorite in $1998 .{ }^{16}$ Dates in the essay ${ }^{17}$ of the Canyon Diablo meteorite vary from one to fourteen billion years old. There is a $1,200 \%$ difference between the youngest and oldest date obtained for the one rock.

Table 4

| Meteorite | Age |
| :--- | :---: |
| Name | Billion Years |
| Canyon Diablo |  |
| Troilite 4 | 1.13 |
| Leach Acetone | 5.73 |
| Leach H,O | 8.31 |
| Troilite dissolved | 10.43 |
| Metal 1 | 13.7 |

## Ar-39/Ar-40 Dating of Mesosiderites

This was dated in 1990 by Scientists from the NASA Johnson Space Center, Houston, Texas. ${ }^{18}$ All of the eleven meteorites dated gave ages older than the Solar System and three dated as being as old, or even older than the evolutionist age of the galaxy. ${ }^{19}$ According to one table the supposed true age is just 3.5 billion years old. ${ }^{20}$

Table 5

| Meteorite | Maximum | Minimum | Age Difference | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Name | Billion Years | Billion Years | Billion Years | Difference |
| 1. Emery | 9.08 | 3.31 | 5.77 | $274 \%$ |
| 2. Estherville | 13.96 | 3.18 | 10.78 | $438 \%$ |
| 3. Hainholz | 5.48 | 1.55 | 3.93 | $353 \%$ |
| 4. Lowicz | 9.93 | 2.92 | 7.01 | $340 \%$ |
| 5. Morristown | 7.92 | 3.60 | 4.32 | $220 \%$ |
| 6. Mount Padbury | 5.52 | 3.49 | 2.03 | $158 \%$ |
| 7. Patwar Basalt | 6.14 | 1.80 | 4.34 | $341 \%$ |
| 8. Patwar Gabbro | 8.43 | 2.67 | 5.76 | $315 \%$ |
| 9. QUE-86900 | 10.92 | 3.24 | 7.68 | $337 \%$ |
| 10. Simondium | 9.17 | 3.27 | 5.90 | $280 \%$ |
| 11. Veramin | 13.13 | 2.71 | 10.42 | $484 \%$ |

## 40Ar-39Ar Chronology

Dated in 2009 by scientists ${ }^{21}$ from Germany and Russia, these meteorite samples gave astounding results. Many dates were older than the evolutionist age of the Solar System, older than the galaxy and older than the Big Bang. ${ }^{22}$ Most age results were hundreds or thousands of percent discordant.

Table 6

| Sample | Maximum | Minimum | Age Difference | Percent |
| :--- | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Difference |
| Table A01. Dhofar 019 whole rock | $\mathbf{1 1 , 6 7 9}$ | 737 | $\mathbf{1 0 , 9 4 2}$ | $\mathbf{1 , 5 8 4 \%}$ |
| Table A02. Dhofar 019 maskelynite | $\mathbf{1 0 , 5 2 1}$ | $\mathbf{8 1 8}$ | $\mathbf{9 , 7 0 3}$ | $\mathbf{1 , 2 8 6 \%}$ |
| Table A03. Dhofar 019 pyroxene | $\mathbf{1 0 , 7 3 0}$ | $\mathbf{8 0 4}$ | $\mathbf{9 , 9 2 6}$ | $\mathbf{1 , 3 3 4 \%}$ |
| Table A04. Dhofar 019 olivine | $\mathbf{1 0 , 4 8 7}$ | $\mathbf{1 , 7 7 8}$ | $\mathbf{8 , 7 0 9}$ | $\mathbf{5 8 9 \%}$ |
| Table A05. Dhofar 019 opaque | $\mathbf{1 4 , 9 1 7}$ | $\mathbf{4 , 4 2 0}$ | $\mathbf{1 0 , 4 9 7}$ | $\mathbf{3 3 7 \%}$ |
| Table A06. SaU 005 whole rock | $\mathbf{7 , 1 8 4}$ | $\mathbf{5 6 8}$ | $\mathbf{6 , 6 1 6}$ | $\mathbf{1 , 2 6 4 \%}$ |
| Table A07. SaU 005 glass | $\mathbf{6 , 2 3 5}$ | $\mathbf{3 , 2 4 7}$ | $\mathbf{2 , 9 8 8}$ | $\mathbf{1 9 2 \%}$ |
| Table A08. SaU 005 maskelynite | $\mathbf{7 , 4 3 2}$ | $\mathbf{1 , 3 4 4}$ | $\mathbf{6 , 0 8 8}$ | $\mathbf{5 5 2 \%}$ |
| Table A10. SaU 005 olivine | $\mathbf{1 3 , 9 7 9}$ | $\mathbf{3 , 8 3 9}$ | $\mathbf{1 0 , 1 4 0}$ | $\mathbf{3 6 4 \%}$ |
| Table A11. Shergotty whole rock | $\mathbf{8 , 5 4 2}$ | $\mathbf{1 , 1 1 2}$ | $\mathbf{7 , 4 3 0}$ | $\mathbf{7 6 8 \%}$ |
| Table A15. Zagami whole rock | $\mathbf{6 , 0 6 4}$ | $\mathbf{9 4}$ | $\mathbf{5 , 9 7 0}$ | $\mathbf{6 , 4 5 1 \%}$ |
| Table A16. Zagami maskelynite | $\mathbf{5 , 7 3 3}$ | $\mathbf{2 3 8}$ | $\mathbf{5 , 4 9 5}$ | $\mathbf{2 , 4 0 8 \%}$ |
| Table A18. Zagami opaque | $\mathbf{7 , 7 0 7}$ | $\mathbf{2 9 0}$ | $\mathbf{7 , 4 1 7}$ | $\mathbf{2 , 6 5 7 \%}$ |
| Table A9. SaU 005 pyroxene | $\mathbf{1 2 , 8 4 5}$ | $\mathbf{1 , 3 5 4}$ | $\mathbf{1 1 , 4 9 1}$ | $\mathbf{9 4 8 \%}$ |

## Shocked Meteorites: Argon-40/Argon-39

Dated in 1997 by scientists ${ }^{23}$ from Germany and France, these meteorite samples gave astounding results also. Many dates were older than the age of the Solar System, older than the galaxy and older than the Big Bang. ${ }^{24}$ Most age results that were hundreds or thousands of percent discordant.

Table 7

| Sample | Maximum | Minimum | Difference | Percent |
| :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Difference |
| A. Rose City (H5/S6) host rock | 4,766 | 193 | 4,573 | 2,469 |
| B. Rose City (H5/S6) melt | 4,529 | 2,126 | 2,403 | 213 |
| C. Rose City (H5/S6) host rock \#1 | 3,876 | 231 | 3,645 | 1,678 |
| D. Rose City (H5/S6) host rock \#2 | 3,259 | 293 | 2,966 | 1,112 |
| E. Travis County (H5/S4) whole rock | 3,614 | 295 | 3,319 | 1,225 |
| F. Yanzhuang (H6/S6) host rock | 5,598 | 65 | 5,533 | 8,612 |
| G. Yanzhuang (H6/S6) melt fragment | 10,217 | 1,902 | 8,315 | 537 |
| H. Yanzhuang (H6/S6) melt vein | 7,016 | 1,314 | 5,702 | 534 |
| I. Alfianello (L6/S5) whole rock | 3,470 | 968 | 2,502 | 358 |
| J. Bluff (L6/S6) host rock | 13,348 | 506 | 12,842 | 2,638 |
| K. Bluff (L6/S6) melt | 3,773 | $554$ | 3,219 | 681 |
| L. Mbale (L5-6) whole rock | 3,531 | 466 | 3,065 | 758 |
| M. McKinney (L4/S4-5) whole rock | 1,821 | 499 | 1,322 | 365 |
| N. Ness County (L6/S6) host rock \#I | 5,052 | 987 | 4,065 | 512 |
| O. Ness County (L6/S6) host rock \#2 | 6,668 | 1,997 | 4,671 | 334 |
| P. Paranaiba (L6/S6) host mk \#I | 3,332 | 453 | 2,879 | 736 |
| Q. Paranaiba (L6/s6) host rock \#2 | 5,593 | 3,110 | 2,483 | 180 |
| R. Taiban (L5/S6) host rock | 2,845 | 492 | 2,353 | 578 |
| S. Taiban (L5/S6) melt | 1,435 | 156 | 1,279 | 920 |
| T. Walters (L6/S4) host rock | 3,452 | 1,592 | 1,860 | 217 |
| U. Walters (L6/S4) melt | 4,074 | 2,026 | 2,048 | 201 |
| V. Beeler (LU/S4) host rock \#I | 6,466 | 798 | 5,668 | 810 |
| W. Beeler (LL6/S4) host rock \#2 | 6,609 | 1,491 | 5,118 | 443 |
| X. ALHA 81011 (eucrite) clast | 3,818 | 375 | 3,443 | 1,018 |
| Y. ALHA 81011 (eucrite) melt | 2,827 | 244 | 2,583 | 1,159 |

## Potassium-Argon age of Iron Meteorites

If we compare the dates below with the previous two tables [Tables 6 and 7] we see that dating done on meteorites has not improved in fifty years! The dates below [Table 8] were dating done in 1958 by scientists from Brookhaven National Laboratory, Upton, New York. ${ }^{25}$ These dates ${ }^{26}$ are just as stupid as the previous two tables. The choice of 4.5 billion years as an "absolute" value is purely and arbitrary choice.

## Meteorite Dating

Table 8

| Meteorite | Age |
| :---: | :---: |
| K-Ar Dating | Billion Years |
| Mt. Ayliff | 6.9 |
| Arispe | 6.8 |
| H. H. Ninninger | 6.9 |
| Carbo | 8.4 |
| Canon Diablo I | 8.5 |
| Canon Diablo I | 6.9 |
| Canon Diablo I | 6.6 |
| Canon Diablo I | 5.3 |
| Canon Diablo II | 13 |
| Canon Diablo II | 11 |
| Canon Diablo II | 10.5 |
| Canon Diablo II | 12 |
| Toluca I | 5.9 |
| Toluca I | 7.1 |
| Toluca II | 10 |
| Toluca II | 10.8 |
| Toluca II | 8.8 |

## The Allende and Orgueil Chondrites

This rock was dated in 1976 by scientists from the United States Geological Survey, Denver, Colorado. ${ }^{27}$ Six were dated as being over ten billion years old. ${ }^{28}$ Two were dated as being as old as the Big Bang explosion. ${ }^{28}$ Fifty three dates were over five billion years. ${ }^{28}$ Below [Tables 9 and 10] we can see the strong discordance between the ${ }^{208} \mathrm{~Pb} /{ }^{232} \mathrm{Th}$ and ${ }^{206} \mathrm{~Pb} /{ }^{238} \mathrm{U}$ dating methods

Table 9

| Pb-208/Th-232 |  |  |
| :---: | :---: | :---: |
| Maximum Age | 14.40 | Billion Years |
| Minimum Age | 4.81 | Billion Years |
| Average Age | 6.40 | Billion Years |
| Age Difference | 9.59 | Billion Years |
| Difference | $299.38 \%$ | Percent |
| Standard Deviation | 3.37 | Billion Years |

Table 10

| Pb-206/U-238 |  |  |
| :---: | :---: | :---: |
| Maximum Age | 9.86 | Billion Years |
| Minimum Age | 3.91 | Billion Years |
| Average Age | 6.02 | Billion Years |
| Age Difference | 5.95 | Billion Years |
| Difference | $252.17 \%$ | Percent |
| Standard Deviation | 1.45 | Billion Years |

## Precise U-Pb dating of Chondrites

This dating was done in 2005 by scientists from USA and Canada. ${ }^{29}$ Five dates were over five billion years old. ${ }^{30}$
Table 11

| Maximum Age | 6,473 | Million Years |
| :---: | :---: | :---: |
| Minimum Age | $\mathbf{4 , 2 4 9}$ | Million Years |
| Average Age | $\mathbf{4 , 6 7 5}$ | Million Years |
| Age Difference | $\mathbf{2 , 2 2 4}$ | Million Years |
| Difference | $\mathbf{1 5 2 \%}$ | Percent |

## U-Pb Ages of Angrites

This dating was done in 2007 by scientists from Australia and Canada. ${ }^{31}$ Eight dates were older than the evolutionist age of the Solar System. ${ }^{32}$

Table 12

| Sample | Pb-206/U-238 |
| :---: | :---: |
| Name | Million Years |
| Angra dos Reis |  |
| 4W3 | $\mathbf{5 , 5 3 5}$ |
| 5W3 | $\mathbf{5 , 6 5 8}$ |
| Lewis Cliff 86010 |  |
| 10W3a | $\mathbf{6 , 0 7 2}$ |
| 11W3 | $\mathbf{6 , 6 2 5}$ |
| D'Orbigny |  |
| 15R | $\mathbf{4 , 8 4 2}$ |
| 16Ra | $\mathbf{4 , 8 9 3}$ |
| 17R | $\mathbf{4 , 6 9 5}$ |
| 18R | $\mathbf{4 , 9 7 2}$ |
| 19R | $\mathbf{5 , 0 8 0}$ |
| 20R | $\mathbf{4 , 9 5 7}$ |
| 21W3 | $\mathbf{5 , 4 7 1}$ |
| 22W3 | $\mathbf{5 , 2 9 1}$ |
| 23W3 | $\mathbf{5 , 5 6 8}$ |

## Argon Diffusion Properties

Dating done in 1980 of various meteorites gave many discordant values. ${ }^{32}$ Six were dated as older than the Solar System. ${ }^{33}$
Table 13

| Meteor's | Maximum | Minimum | Percentage |
| :---: | :---: | :---: | :---: |
| Name | Billion Years | Billion Years | Difference |
| Wellman | 5.2 | 3.737 | $139 \%$ |
| Wickenburg | 3.005 | 0.568 | $\mathbf{5 2 9 \%}$ |
| Shaw | 5.15 | 4.17 | $123 \%$ |
| Louisville | 5.5 | 0.51 | $1,078 \%$ |
| Arapahoe | 9.71 | 0.89 | $1,091 \%$ |
| Farmington | 3.7 | 0.511 | $\mathbf{7 2 4 \%}$ |
| Lubbock | 9.4 | 0.12 | $\mathbf{7 , 8 3 3 \%}$ |
| Orvinio | 8.78 | 0.764 | $1,149 \%$ |

## Meteorite Dating

## U-Th-Pb Dating of Abee E4 Meteorite

This dating was done in 1982 by scientists from the NASA, Johnson Space Center, Houston Texas and the U.S. Geological Survey, Denver, Colorado. ${ }^{35}$ The two table below [Table 14, 15] are a summary of Argon dating done on different meteorite samples. ${ }^{36}$ Both sample record dates older than the evolutionist age of the solar system. The original article has undated ${ }^{207} \mathrm{~Pb}{ }^{206} \mathrm{~Pb}$ ratios. If we run the through Isoplot ${ }^{37}$ we find the ratios ${ }^{38,39}$ give the results in tables 16 and 17. All are much older than the evolutionist age of the solar system.

Table 14

| Abee clast 2, 2, 05 |  |  |
| :---: | :---: | :---: |
| Maximum Age | $\mathbf{7 , 2 0 0}$ | Million Years |
| Minimum Age | $\mathbf{3 , 9 9 0}$ | Million Years |
| Average Age | $\mathbf{4 , 6 4 0}$ | Million Years |
| Age Difference | $\mathbf{3 , 2 1 0}$ | Million Years |
| Difference | $\mathbf{1 8 0 \%}$ | Percent |
| Standard Deviation | $\mathbf{8 4 0}$ | Million Years |

## Table 15

| Abee clast 3, 3, 06 |  |  |
| :---: | :---: | :---: |
| Maximum Age | $\mathbf{8 , 9 0 0}$ | Million Years |
| Minimum Age | $\mathbf{3 , 5 8 0}$ | Million Years |
| Average Age | $\mathbf{4 , 6 1 0}$ | Million Years |
| Age Difference | $\mathbf{5 , 3 2 0}$ | Million Years |
| Difference | $\mathbf{2 4 8 \%}$ | Percent |
| Standard Deviation | $\mathbf{1 , 3 6 0}$ | Million Years |

Table 16

| Meteorite | $\mathbf{P b - 2 0 6 / 2 0 7}$ | Pb-206/207 |
| :---: | :---: | :---: |
| Name | Ratio | Age |
| Abee 1 | 1.0992 | 5,370 |
|  | 1.0945 | 5,364 |
|  | 1.0947 | 5,364 |
|  | 1.0330 | 5,283 |
|  |  |  |
| Abee 2 | 1.1000 | 5,371 |
|  | 1.0966 | 5,367 |
|  | 0.8958 | 5,082 |
|  |  |  |
|  | 1.0976 | 5,368 |
|  | 1.0967 | 5,367 |
|  | 1.0708 | 5,333 |

Table 17

| Meteorite | Pb-207/206 | Pb-207/206 |
| :---: | :---: | :---: |
| Name | Ratio | Age |
| Abee 1 | 1.0993 | 5,370 |
|  | 1.1005 | 5,372 |
|  | 1.0994 | 5,370 |
|  |  |  |
| Abee 2 | 1.1005 | 5,372 |
|  | 1.0991 | 5,370 |
|  |  |  |
| Abee 3 | 1.0999 | 5,371 |
|  | 1.0993 | 5,370 |
|  |  |  |
| Indarch | 1.1005 | 5,372 |
|  |  |  |
| St. Sauveur | 0.7015 | 4,734 |
|  |  |  |
| Canyon Diablo | 1.1060 | 5,379 |

## 39Ar/40Ar Ages of Eucrites

These samples were dated in 2003 by scientists from the NASA Johnson Space Center, Houston, Texas, and the Lockheed-Martin Corporation, Houston, Texas. ${ }^{40}$ Ten of the meteorites were dated as being over five billion years old. ${ }^{41}$

Table 18

| Meteorite | Maximum | Minimum | Difference | Percent |
| :---: | :---: | :---: | :---: | :---: |
| Sample | Million Years | Million Years | Million Years | Difference |
| A. OUE 97053,8 | 9,669 | 3,749 | 5,920 | 257\% |
| B. GRA 98098,26 WR | 7,008 | 3,239 | 3,769 | 216\% |
| C. PCA - 82502,81 | 5,431 | 3,300 | 2,131 | 164\% |
| D. PCA - 91007,26 | 4,460 | 1,560 | 2,900 | 285\% |
| E. Caldera | 4,493 | 2,819 | 1,674 | 159\% |
| F. Asuka-881388,55 | 4,853 | 3,250 | 1,603 | 149\% |
| G. Asuka-881467,42 | 4,465 | 202 | 4,263 | 2,210\% |
| H. GRO - 95533,7 | 4,096 | 2,823 | 1,273 | 145\% |
| I. OUE - 97014,5 | 4,553 | 2,947 | 1,606 | 154\% |
| J. Moama | 4,484 | 866 | 3,618 | 517\% |
| K. EET - 87520 | 5,481 | 2,004 | 3,477 | 273\% |
| L. Moore County | 6,742 | 1,827 | 4,915 | 369\% |
| M. Serra de Mage | 6,100 | 499 | 5,601 | 1222\% |
| N. EET -87548 | 3,674 | 1,738 | 1,936 | 211\% |
| O. ALH -85001,32 | 4,754 | 3,097 | 1,657 | 153\% |
| P. Piplia Kalan | 4,284 | 162 | 4,122 | 2644\% |
| Q. Sioux County | 4,513 | 2,189 | 2,324 | 206\% |
| R. Asuka-87272,49 | 3,652 | 342 | 3,310 | 1067\% |
| S. Macibini Glass | 5,788 | 2,621 | 3,167 | 220\% |
| T. QUE - 94200,13 | 3,724 | 3,169 | 555 | 117\% |
| U. EET - 87509,24 | 7,496 | 4,026 | 3,470 | 186\% |
| V. EET - 87509,71 | 4,449 | 3,558 | 891 | 125\% |
| W. EET -87509,74 | 4,645 | 873 | 3,772 | 532\% |
| X. EET - 87531,21 | 4,176 | 3,301 | 875 | 126\% |
| Y. EET - 87503,53 | 5,209 | 3,568 | 1,641 | 145\% |
| Z. EET - 87503,23 | 5,324 | 2,294 | 3,030 | 232\% |

## Argon-39/Argon-40 Ages

These samples were dated in 2003 by scientists from the NASA Johnson Space Center, Houston, Texas, and the Lockheed-Martin Corporation, Houston, Texas. ${ }^{42}$ The Monahans chondrite and halite was dated in 2001 as being over eight billion years old. ${ }^{43}$

Table 19

| Maximum Age | $\mathbf{8 , 0 5 8}$ | Million Years |
| :---: | ---: | :---: |
| Minimum Age | $\mathbf{3 , 8 9 9}$ | Million Years |
| Average Age | $\mathbf{4 , 4 7 4}$ | Million Years |
| Age Difference | $\mathbf{4 , 1 5 9}$ | Million Years |
| Difference | $\mathbf{2 0 6 \%}$ | Percent |

## Rb-Sr Ages Of Iron Meteorites

These samples were dated in 1967 by the California Institute of Technology, Pasadena, California. ${ }^{44}$ Even after 40 years of research and the massive improvement in laboratory equipment and computer technology, things today are just as bad as back then! Fourteen of the dates are five billion years or more. ${ }^{45}$

Table 20

| Meteorite | Age |
| :---: | :---: |
| Rb-Sr Dating | Billion Years |
| Four Corners AM 1 | 8.4 |
|  | 9.3 |
|  | 9.1 |
|  | 9.1 |
|  | 8.5 |
|  | 8.2 |
| Four Corners AM 2-B1 | 5.0 |
|  | 5.1 |
|  | 4.8 |
| Four Corners AM 2-B6 | 5.0 |
| Four Corners H-1 | 5.0 |
| Four Corners H-3 | 4.9 |
| Four Corners N-1 | 5.2 |
| Linwood H-B1 | 5.1 |
| Odessa N1-8 | 4.9 |
|  | 4.8 |
| Toluca N-A3 | 5.0 |
|  | 4.7 |
|  | 4.9 |
|  | 4.9 |
|  | 5.1 |

## 40-Ar / 39-Ar Ages of Allende

Scientist from the Max-Planck-Institute, Heidelberg, Germany, dated these samples in 1980. ${ }^{46}$ Seven samples were dated as being over five billion years old. ${ }^{47}$

Table 21

| Sample | Maximum | Minimum | Difference | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Difference |
| Sample 01 | $\mathbf{4 , 4 5 5}$ | $\mathbf{2 , 4 5 2}$ | $\mathbf{2 , 0 0 3}$ | $\mathbf{1 8 1 \%}$ |
| Sample 02 | $\mathbf{5 , 0 6 7}$ | $\mathbf{3 , 0 2 7}$ | $\mathbf{2 , 0 4 0}$ | $\mathbf{1 6 7 \%}$ |
| Sample 03 | $\mathbf{4 , 9 1 9}$ | $\mathbf{4 , 0 9 2}$ | $\mathbf{8 2 7}$ | $\mathbf{1 2 0 \%}$ |
| Sample 04 | $\mathbf{4 , 9 3 9}$ | $\mathbf{4 , 3 6 3}$ | $\mathbf{5 7 6}$ | $\mathbf{1 1 3 \%}$ |
| Sample 05 | $\mathbf{4 , 6 9 1}$ | $\mathbf{2 , 2 4 8}$ | $\mathbf{2 , 4 4 3}$ | $\mathbf{2 0 8 \%}$ |
| Sample 06 | $\mathbf{4 , 9 4 3}$ | $\mathbf{4 , 1 0 2}$ | $\mathbf{8 4 1}$ | $\mathbf{1 2 0 \%}$ |
| Sample 07 | $\mathbf{4 , 8 3 5}$ | $\mathbf{4 , 1 6 6}$ | $\mathbf{6 6 9}$ | $\mathbf{1 1 6 \%}$ |
| Sample 08 | $\mathbf{4 , 7 7 6}$ | $\mathbf{4 , 2 0 7}$ | $\mathbf{5 6 9}$ | $\mathbf{1 1 3 \%}$ |
| Sample 09 | $\mathbf{5 , 0 0 4}$ | $\mathbf{3 , 6 8 2}$ | $\mathbf{1 , 3 2 2}$ | $\mathbf{1 3 5 \%}$ |
| Sample 10 | $\mathbf{4 , 5 0 5}$ | $\mathbf{1 , 8 7 1}$ | $\mathbf{2 , 6 3 4}$ | $\mathbf{2 4 0 \%}$ |
| Sample 11 | $\mathbf{4 , 7 0 7}$ | $\mathbf{3 , 6 3 1}$ | $\mathbf{1 , 0 7 6}$ | $\mathbf{1 2 9 \%}$ |
| Sample 12 | $\mathbf{5 , 6 4 1}$ | $\mathbf{4 , 3 3 0}$ | $\mathbf{1 , 3 1 1}$ | $\mathbf{1 3 0 \%}$ |
| Sample 13 | $\mathbf{4 , 5 4 9}$ | $\mathbf{4 , 3 9 6}$ | $\mathbf{1 5 3}$ | $\mathbf{1 0 3 \%}$ |
| Sample 19 | $\mathbf{5 , 5 9 0}$ | $\mathbf{4 , 1 1 0}$ | $\mathbf{1 , 4 8 0}$ | $\mathbf{1 3 6 \%}$ |
| Sample 20 | $\mathbf{5 , 8 1 2}$ | $\mathbf{4 , 3 6 7}$ | $\mathbf{1 , 4 4 5}$ | $\mathbf{1 3 3 \%}$ |
| Sample 21 | $\mathbf{5 , 7 8 4}$ | $\mathbf{4 , 2 5 6}$ | $\mathbf{1 , 5 2 8}$ | $\mathbf{1 3 5 \%}$ |
| Sample 23 | $\mathbf{7 , 4 6 0}$ | $\mathbf{3 , 9 6 7}$ | $\mathbf{3 , 4 9 3}$ | $\mathbf{1 8 8 \%}$ |

## The Fossil LL6 Chondrite

These meteorite fragments were dated in 2010 by scientists from Australia, South Africa, England and Finland. ${ }^{48}$ Some dates are over 4,000 percent discordant. ${ }^{49}$ The oldest dates are as old as the evolutionist age of the galaxy. ${ }^{49}$

Table 22

| Sample | Maximum Age | Minimum Age | Age Difference | Percent |
| :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Difference |
| A | $\mathbf{2 , 0 6 5}$ | 164 | $\mathbf{1 , 9 0 2}$ | $\mathbf{1 , 2 6 3 \%}$ |
| B | $\mathbf{2 , 8 4 9}$ | $\mathbf{9 2 4}$ | $\mathbf{1 , 9 2 5}$ | $\mathbf{3 0 8 \%}$ |
| C | $\mathbf{2 , 0 4 3}$ | 177 | $\mathbf{1 , 8 6 7}$ | $\mathbf{1 , 1 5 7 \%}$ |
| D | $\mathbf{7 , 1 1 9}$ | $\mathbf{1 7 4}$ | $\mathbf{6 , 9 4 5}$ | $\mathbf{4 , 0 8 2 \%}$ |
| E | $\mathbf{3 , 8 8 9}$ | $\mathbf{2 4 9}$ | $\mathbf{3 , 6 4 0}$ | $\mathbf{1 , 5 6 3 \%}$ |
| F | $\mathbf{1 1 , 2 5 0}$ | $\mathbf{5 , 4 7 5}$ | $\mathbf{5 , 7 7 5}$ | $\mathbf{2 0 5 \%}$ |

## K/Ar Age Determinations of Iron Meteorites

This was dated in 1968 and produced ages between 1.5 and 7.4 billion years. ${ }^{50}$ Eight dates were older than the age of the Solar System. ${ }^{51}$ Comparing dating forty years ago with the latest dating techniques shows no improvement.

Table 23

| Meteorite | Maximum | Minimum | Difference | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| K-Ar Dating | Billion Years | Billion Years | Billion Years | Difference |
| Carthage 527 | 6.25 | 3.65 | 2.60 | $171.23 \%$ |
| Odessa 485 | 7.40 | 4.20 | 3.20 | $176.19 \%$ |
| Tombigbee River 602 | 6.35 | 4.85 | 1.50 | $130.93 \%$ |

## The Peace River Shocked M Chondrite

The meteorite was dated by scientists from the Physics Department, Sheffield University, United Kingdom. ${ }^{52}$ The dates listed in the original article ${ }^{53}$ are much older than the evolutionist age of the solar system. This was done in 1988. If you compare table 23 and table 24 in my essay you will see that after 20 years of research the dating is just as bad as day one.

Table 24

| Sample | Maximum | Minimum | Difference | Percent |
| :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Difference |
| TABLE 1A | $\mathbf{3 , 1 7 6}$ | $\mathbf{1 9 0}$ | $\mathbf{2 , 9 8 6}$ | $\mathbf{1 6 7 2 \%}$ |
| TABLE 1B | $\mathbf{5 , 0 0 6}$ | $\mathbf{4 2 2}$ | $\mathbf{4 , 5 8 4}$ | $\mathbf{1 1 8 6 \%}$ |
| TABLE 2 | $\mathbf{6 , 1 3 0}$ | $\mathbf{9 5 0}$ | $\mathbf{5 , 1 8 0}$ | $\mathbf{6 4 5 \%}$ |
| TABLE 4 | $\mathbf{2 , 5 1 5}$ | $\mathbf{5 0 0}$ | $\mathbf{2 , 0 1 5}$ | $\mathbf{5 0 3 \%}$ |
| TABLE 5 | $\mathbf{7 , 1 0 0}$ | $\mathbf{5 1 0}$ | $\mathbf{6 , 5 9 0}$ | $\mathbf{1 3 9 2 \%}$ |

## Ar-39/Ar-40 Dating of IAB Iron Meteorites

In 1979 this dating was carried out by the Department of Physics, University of California, Berkeley. ${ }^{54}$ One of the meteorites was dated at almost ten billion years old. ${ }^{55}$

Table 25

| Maximum Age | $\mathbf{9 , 5 0 0}$ | Million Years |
| :---: | :---: | :---: |
| Minimum Age | $\mathbf{4 , 4 6 0}$ | Million Years |
| Average Age | $\mathbf{5 , 1 6 1}$ | Million Years |
| Age Difference | $\mathbf{5 , 0 4 0}$ | Million Years |
| Difference | $\mathbf{2 1 3 \%}$ | Percent |
| Standard Deviation | $\mathbf{1 , 7 5 3}$ | Million Years |

## Antarctic LL-Chondrites

This sample as dated in 1990 by the Department of Earth Sciences, Faculty of Science, Kobe University, Japan. ${ }^{56}$ Some were dated as being older than the evolutionist age of the Solar System. ${ }^{57}$

Table 26

| Maximum Age | $\mathbf{7 , 3 3 0}$ | Million Years |
| :---: | :---: | :---: |
| Minimum Age | $\mathbf{3 , 1 1 0}$ | Million Years |
| Average Age | $\mathbf{4 , 4 1 0}$ | Million Years |
| Age Difference | $\mathbf{4 , 2 2 0}$ | Million Years |
| Difference | $\mathbf{2 3 5 \%}$ | Percent |
| Standard Deviation | $\mathbf{9 5 0}$ | Million Years |

## Single grain (U-Th)/He ages

This sample as dated in 2003 by the Department of Earth and Planetary Science, University of California, Berkeley. ${ }^{58}$ The dating of one rock produced dates that varied by over 300 percent. ${ }^{59}$

Table 27

| Maximum Age | $\mathbf{4 , 9 0 9}$ | Million Years |
| :---: | :---: | :---: |
| Minimum Age | $\mathbf{1 , 4 5 2}$ | Million Years |
| Average Age | $\mathbf{4 , 0 9 1}$ | Million Years |
| Age Difference | $\mathbf{3 , 4 5 7}$ | Million Years |
| Difference | $\mathbf{3 3 8 \%}$ | Percent |

## Resolution Reveals New Problems

A joint paper by scientist from Australia, USA, Denmark and France. ${ }^{60}$ It discusses why there is discord between dating done on meteorite samples. Below is a list of the five major points discussed in the article. ${ }^{61}$

## Meteorite Dating

Table 28

| Potential problem | Level of awareness and suggested actions |
| :---: | :---: |
| 1 | 1 |
| Presence of non-radiogenic Pb of unknown isotopic composition. <br> The most important and common problem of all. | Recognized by most of the community. <br> Better methods for removal of non-radiogenic $\mathbf{P b}$ are required. |
| 2 | 2 |
| Deviations from closed system evolution (loss of Pb , gain or loss of $\mathbf{U}$ ). Important and common. | Requires monitoring $\mathbf{U}-\mathbf{P b}$ concordance and studying distribution of U and radiogenic Pb . |
| 3 | 3 |
| Mis-identification of the processes that start or reset the isotopic clocks. <br> Important and common. | Requires studying distribution of U and radiogenic Pb , improving experimental reference data set for element migration caused by diffusion, alteration and shock, and linking isotopic dating <br> to the studies in mineralogy and petrology of meteorites. |
| 4 | 4 |
| Analytical problems (fractionation, instrumentspecific etc.) and blank subtraction. Important. | Problems are widely recognized. Ongoing analytical developments help to reduce them. |
| 5 | 5 |
| Fractionation of radiogenic Pb isotopes induced by leaching of alpha recoil tracks. <br> Potentially important. | Recognized by some "terrestrial" geochronologists, less known to meteoriticists. <br> Detailed experimental studies are required to understand the nature and extent of fractionation. |

## Fission-Track Ages Of Four Meteorites

Six different meteorites were dated in 1976 by scientists from the Enrico Fermi Institute and Department of Chemistry, University of Chicago, Chicago, Illinois. ${ }^{62}$ The dates [Table 29] varied by almost one thousand percent! ${ }^{63}$ If we look at table 30 we can see the four methods used [Fission Track, Potassium-Argon, Uranium-Helium and Rubidium-Strontium] and the discordance between them. ${ }^{63}$

Table 29

| Sample | Maximum Age | Minimum Age | Age Difference | Percent |
| :---: | :---: | :---: | :---: | :---: |
| Name | Billion Years | Billion Years | Billion Years | Difference |
| Bondoc | 1.30 | 0.14 | 1.16 | $929 \%$ |
| Mincy | 3.93 | 1.50 | 2.43 | $262 \%$ |
| Nakhla | 4.40 | 0.77 | 3.63 | $571 \%$ |
| Serra | 2.70 | 0.54 | 2.16 | $500 \%$ |
| Washougal | 4.60 | 4.00 | 0.60 | $115 \%$ |
| Allende | 4.50 | 3.60 | 0.90 | $125 \%$ |

Table 30

| Meteorite | Fission Track | K-Ar | U-He | Rb-Sr |
| :---: | :---: | :---: | :---: | :---: |
| Name | Billion Years | Billion Years | Billion Years | Billion Years |
| Bondoc | 0.14 | 1.30 | 0.60 |  |
| Mincy | 1.50 | 3.93 |  |  |
| Nakhla | 4.40 | 1.30 | 0.77 | 3.60 |
| Serra | 0.54 | 2.70 |  |  |
| Washougal | 4.60 | 4.00 |  |  |
| Allende | 4.50 | 4.40 |  | 3.60 |

## Discordant Meteorite Ages

Many dates are highly discordant and give different ages for the one meteorite. Meteorite Dar al Gani was dated in 2004 by scientists from Italy and England. ${ }^{64}$

Meteorite Dar al Gani ${ }^{65}$

| Maximum Age | $\mathbf{3 , 7 2 5}$ | Million Years |
| :---: | :---: | :---: |
| Minimum Age | $\mathbf{1 , 7 4 9}$ | Million Years |
| Average Age | $\mathbf{3 , 1 2 0}$ | Million Years |
| Age Difference | $\mathbf{1 , 9 7 6}$ | Million Years |
| Difference | $\mathbf{2 1 3 \%}$ | Percent |

Table 31
The Kirin Chondrite was dated in 1981 by scientists from the Research School of Earth Sciences, The Australian National University. Canberra. ${ }^{66}$

The Kirin Chondrite ${ }^{67}$

| Maximum Age | $\mathbf{4 , 3 1 0}$ | Million Years |
| :---: | :---: | :---: |
| Minimum Age | $\mathbf{5 2 0}$ | Million Years |
| Average Age | $\mathbf{3 , 1 6 0}$ | Million Years |
| Age Difference | $\mathbf{3 , 7 9 0}$ | Million Years |
| Difference | $\mathbf{8 2 8 \%}$ | Percent |
| Table 32 |  |  |

The Acapulco Meteorite was dated in 2003 by scientists from the Department of Earth and Planetary Science, University of California, Berkeley. ${ }^{68}$
(U-Th)/He ages from Acapulco Meteorite ${ }^{69}$

| (U-Th)/He ages from Acapulco Meteorite |  |  |  |
| :---: | :---: | :---: | :---: |
| Maximum Age | $\mathbf{4 , 9 0 9}$ | Million Years |  |
| Minimum Age | $\mathbf{1 , 4 5 2}$ | Million Years |  |
| Average Age | $\mathbf{4 , 0 9 1}$ | Million Years |  |
| Age Difference | $\mathbf{3 , 4 5 7}$ | Million Years |  |
| Difference | $\mathbf{3 3 8 \%}$ | Percent |  |

Table 33


Kyoungwon Min admits that the dating of the Acapulco meteorite is extremely discordant: "Note that seven out of 12 corrected ages are older than the age of the solar system." ${ }^{70}$ The diagram above is taken from his work. ${ }^{70}$

These whole rock nakhiltes were dated in 2004 by scientists from the Lunar and Planetary Laboratory, University of Arizona,
Tucson, Arizona. ${ }^{71}$

40Ar-39Ar Studies of Whole Rock Nakhlites ${ }^{72}$

| Table | Maximum | Minimum | Difference | Difference |
| :---: | :---: | :---: | :---: | :---: |
| Number | Million Years | Million Years | Million Years | Percent |
| Table 1 | 1,405 | 262 | 1,143 | $536 \%$ |
| Table 2 | 1,409 | 199 | 1,210 | $708 \%$ |
| Table 3 | 1,425 | 761 | 664 | $187 \%$ |

## Table 34

The Kirin Chondrite was dated in 1980 by scientists from the Research School of Earth Sciences, The Australian National University. Canberra. ${ }^{73}$

History Of The Kirin Chondrite ${ }^{74}$

| Table | Maximum | Minimum | Difference | Difference |
| :---: | :---: | :---: | :---: | :---: |
| Number | Billion Years | Billion Years | Billion Years | Percent |
| Kirin-1 | 4.36 | 2.16 | 2.2 | $102 \%$ |
| Kirin-2 | 4.06 | 0.48 | 3.58 | $746 \%$ |

Table 35

## Uranium-Thorium-Lead Dating Of Shergotty Phosphates

This dating was done in 2000 by scientists from the Department of Earth and Planetary Sciences, Hiroshima University, Japan and the Planetary Geosciences Institute, Department of Geological Sciences, University of Tennessee. ${ }^{75}$ According to isochron diagrams in the original article, the meteorite's true age is 200 million years old. ${ }^{76}$ If we take the list of ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios in this article ${ }^{77}$ and run them through Isoplot we get the dates as shown in table 36 below.

Table 36

| Sample | Pb-207/206 | Pb-207/206 |
| :---: | :---: | :---: |
| Name | Ratio | Age |
| SHR04.1 | 0.889 | 5,071 |
| SHRO5.1 | 0.916 | 5,114 |
| SHR06.1 | 0.788 | 4,900 |
| SHR13.1 | 0.876 | 5,051 |
| SHRI5.1 | 0.833 | 4,979 |
| SHR16.1 | 0.869 | 5,039 |
| SHR19.1 | 0.821 | 4,959 |
| SHR21.1 | 0.842 | 4,994 |
| SHR26.1 | 0.922 | 5,123 |
| SHR26.2 | 0.831 | 4,976 |
| SHR27.1 | 0.867 | 5,036 |
| SHR28.1 | 0.813 | 4,945 |
| SHR29.1 | 0.827 | 4,969 |

## Ion microprobe $\mathrm{U}-\mathrm{Th}-\mathrm{Pb}$ dating

This dating was done in 2000 by scientists from the Department of Earth and Planetary Sciences, Hiroshima University, Japan. ${ }^{78}$ According to isochron diagrams in the original article, the meteorite's true age is between 1200 and 1700 million years old. ${ }^{79}$ If we take the list of ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios in this article ${ }^{80}$ and run them through Isoplot we get the dates as shown in table 37 below.

Table 37

| Sample | Pb-207/206 | Pb-207/206 |
| :---: | :---: | :---: |
| Name | Ratio | Age |
| LAFA01.01 | 0.7907 | 4,905 |
| LAFA03.01 | 0.3969 | $\mathbf{3 , 8 9 7}$ |
| LAFA04.01 | 0.6561 | 4,637 |
| LAFA04.02 | 0.6639 | 4,654 |
| LAFA04.03 | 0.6898 | 4,710 |
| LAFA05.01 | 0.7999 | 4,922 |
| LAFA08.01 | 0.4505 | 4,087 |
| LAFA09.01 | 0.7126 | 4,756 |
| LAFA10.01 | 0.6506 | 4,625 |
| Y-000593.1 | 0.9029 | 5,093 |
| Y-000593.2 | 0.7225 | 4,776 |
| Y-000593.3-1 | 1.0819 | 5,348 |
| Y-000593.3-2 | 0.8453 | 5,000 |
| Y-000593.4 | 0.7097 | 4,750 |
| Y-000593.5 | 0.6311 | 4,581 |
| Y-000749.1 | 0.7842 | 4,893 |
| Y-000749.3 | 0.9092 | 5,103 |
| Y-000749.4 | 0.7529 | 4,835 |
| Y-000749.5-1 | 0.8569 | 5,019 |

## The Chondritic Meteorite Orvinio

Scientists from Arizona, Massachusetts, New Mexico and Florida performed this dating in 2004. ${ }^{81}$ Four of the meteorites dated to be older than the evolutionist age of the Solar System. ${ }^{82}$ One date to be older than the Big Bang. ${ }^{82}$ The discordance between dates varied from hundreds to thousands of percent in error. ${ }^{82}$

Table 38

| Table | Max Age | Min Age | Difference | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Difference |
| A1 | $\mathbf{1 7 , 1 7 8}$ | $\mathbf{5 7 0}$ | $\mathbf{1 6 , 6 0 8}$ | $\mathbf{2 , 9 1 4 \%}$ |
| A2 | $\mathbf{3 , 6 6 0}$ | $\mathbf{3 2 4}$ | $\mathbf{3 , 3 3 6}$ | $\mathbf{1 , 0 3 0 \%}$ |
| A3 | $\mathbf{3 , 7 2 0}$ | $\mathbf{7 0 3}$ | $\mathbf{3 , 0 1 7}$ | $\mathbf{4 2 9 \%}$ |
| A4 | $\mathbf{7 , 8 0 0}$ | $\mathbf{9 0 4}$ | $\mathbf{6 , 8 9 6}$ | $\mathbf{7 6 3 \%}$ |
| A5 | $\mathbf{7 , 1 0 0}$ | $\mathbf{9 2 2}$ | $\mathbf{6 , 1 7 8}$ | $\mathbf{6 7 0 \%}$ |
| A6 | $\mathbf{8 , 5 0 0}$ | $\mathbf{5 2 6}$ | $\mathbf{7 , 9 7 4}$ | $\mathbf{1 , 5 1 6 \%}$ |

## Martian Meteorite Chronology

This meteorite was dated in 2011 by scientists from the Lawrence Livermore National Laboratory, Physical and Life Sciences, Institute of Geophysics and Planetary Physics, California and the Department of Earth and Planetary Sciences, University of New Mexico. ${ }^{83}$ The article states that the meteorite's true age is 3.6 billion years. ${ }^{84}$ If we take the list of ${ }^{207} \mathrm{~Pb}{ }^{206} \mathrm{~Pb}$ ratios in this article ${ }^{85}$ and run them through Isoplot we get the dates as shown in table 39 below.

Table 39

| Sample | Pb-207/206 | Pb-207/206 |
| :---: | :---: | :---: |
| Name | Ratio | Age |
| Plag(R) | 0.751287431 | $\mathbf{4 , 8 3 2}$ |
| Plag(L) | 0.787456711 | $\mathbf{4 , 8 9 9}$ |
| Px(R) | 0.580150952 | $\mathbf{4 , 4 5 9}$ |
| Px(L) | 0.699212521 | 4,729 |
| WR(R) | 0.480536633 | $\mathbf{4 , 1 8 3}$ |
| WR(L) | 0.489632855 | $\mathbf{4 , 2 1 0}$ |
| Ilm | 0.498182294 | $\mathbf{4 , 2 3 6}$ |
| Heated Sample |  |  |
| Plag(R) | 0.773980154 | $\mathbf{4 , 8 7 5}$ |
| Plag(L) | 0.640266469 | $\mathbf{4 , 6 0 2}$ |
| Plag-rej | 0.61697479 | $\mathbf{4 , 5 4 8}$ |
| Px(R) | 0.655620155 | $\mathbf{4 , 6 3 6}$ |
| Px(L) | 0.623966942 | $\mathbf{4 , 5 6 5}$ |
| Px-rej | 0.565672185 | $\mathbf{4 , 4 2 2}$ |
| WR(R) | 0.500867867 | $\mathbf{4 , 2 4 4}$ |
| WR(L) | 0.515289324 | $\mathbf{4 , 2 8 6}$ |
| Ilm | 0.498417311 | $\mathbf{4 , 2 3 7}$ |
| NBS-981 | 0.913501361 | $\mathbf{5 , 1 1 0}$ |
| Faraday-Daly | 0.913967671 | $\mathbf{5 , 1 1 1}$ |

## ${ }^{39} \mathrm{Ar} /{ }^{40} \mathrm{Ar}$ "ages" in Martian Shergottites

I downloaded this table from the official Meteoritics website. ${ }^{86}$ Six of the meteorites were dated as being well over five billion years old. One was dated as being as old as the evolutionist age of the Milky Way Galaxy. ${ }^{86}$

Table 40

| Sample | Max Age | Min Age | Difference | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Difference |
| Los Angeles Plag | 4,569 | 183 | 4,387 | 2,404\% |
| Los Angeles, WR | 1,270 | 156 | 1,114 | 714\% |
| Los Angeles Pyx | 7,432 | 581 | 6,851 | 1,180\% |
| NWA-3171 Plag | 2,484 | 203 | 2,281 | 1,121\% |
| NWA-3171 Glass | 2,056 | 299 | 1,757 | 588\% |
| NWA-2975 Plag | 5,709 | 262 | 5,447 | 2,080\% |
| Dhofar 019 Plag | 10,150 | 453 | 9,697 | 2,140\% |
| Dhofar 019 WR | 7,791 | 614 | 7,177 | 1,170\% |
| DaG476 Plag | 3,378 | 432 | 2,946 | $681 \%$ |
| DAG 476 WR | 5,889 | 980 | 4,909 | 501\% |
| DaG476-Px-Dark | 7,975 | 1,746 | 6,229 | 357\% |
| DaG476-Px-Light | 4,117 | 391 | 3,726 | 953\% |
| NWA-1068 WR | 2,524 | 61 | 2,463 | 4,043\% |
| SAU-005 WR | 3,988 | -0.4619 | 3,988 | 863,490\% |
| Y-980459 WR | 1,784 | 583 | 1,201 | 206\% |

## Argon Dating Of Chondrites

I downloaded this table from the official Meteoritics website. ${ }^{87}$ Four of the meteorites were dated as being well over five billion years old. One was dated as being older than the evolutionist age of the Milky Way Galaxy. ${ }^{87}$

Table 41

| Meteorite | Maximum Age | Minimum Age | Difference | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Name | Billion Years | Billion Years | Billion Years | Difference |
| Caddo \#5 | 12.55 | 4.22 | 8.33 | $197 \%$ |
| EET833,5 | 6.82 | 2.21 | 4.60 | $208 \%$ |
| Udei Station | 4.52 | 1.43 | 3.09 | $216 \%$ |
| Campo del Cielo | 7.71 | 3.40 | 4.31 | $127 \%$ |
| Kendall Co. | 7.59 | 2.06 | 5.53 | $269 \%$ |

## Isotopic Lead Ages Of Meteorites

This dating was done in 1973 by scientist from Switzerland and California. ${ }^{88}$ The dates ${ }^{89}$ below in table 42 give numerous values much older than the so called age of the Solar System.

Table 42

| Meteorite | 206Pb/238U | 207Pb/235U | 207Pb/206Pb |
| :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years |
| Bruderheim-1 | $\mathbf{4 1 2 6}$ | $\mathbf{4 4 4 7}$ | $\mathbf{4 6 4 7}$ |
| Bruderheim-2 | $\mathbf{4 5 4 2}$ | $\mathbf{4 5 9 2}$ | $\mathbf{4 6 2 8}$ |
| Bruderheim-3 | 4959 | 4703 | 4605 |
| Richardton-1 | $\mathbf{8 6 1 5}$ | $\mathbf{5 6 0 2}$ | $\mathbf{4 6 0 4}$ |
|  |  |  | $\mathbf{4 , 6 3 8}$ |
| Richardton-2 | $\mathbf{6 8 3 4}$ | 5230 | $\mathbf{4 6 3 3}$ |
| Pultusk | 5334 | $\mathbf{4 9 3 9}$ | $\mathbf{4 6 5 7}$ |
|  |  |  | $\mathbf{4 , 6 5 1}$ |

If we take the list of ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios in this article ${ }^{90}$ and run them through Isoplot we get the dates as shown in table 39 below.
Table 43

| Meteorite | 206Pb/204Pb | 207Pb/204Pb | 207Pb/206Pb | 207Pb/206Pb |
| :---: | :---: | :---: | :---: | :---: |
| Name | Amount | Amount | Ratio | Age |
| Allende-I | 1,064 | 1,088 | 1.0226 | 5,269 |
| Allende-II | 1,012 | 1,078 | 1.0652 | 5,326 |
| Murchison | 977 | 1,056 | 1.0809 | 5,346 |
|  | 985 | 1,062 | 1.0782 | 5,343 |
| Mezo-Madaras | 9,449 | 10,384 | 1.0990 | 5,370 |
|  | 9,444 | 10,356 | 1.0966 | 5,367 |
| Bruderheim-I | 3,562 | 2,683 | 0.7532 | 4,836 |
| Bruderheim-II | 3,023 | 2,327 | 0.7698 | 4,867 |
| Bruderheim-III | 3,275 | 2,469 | 0.7539 | 4,837 |
|  | 3,733 | 2,741 | 0.7343 | 4,799 |
| Richardton-I | 2,155 | 1,794 | 0.8325 | 4,978 |
|  | 2,187 | 1,796 | 0.8212 | 4,959 |
| Richardton-II | 2,228 | 1,827 | 0.8200 | 4,957 |
|  | 2,571 | 2,050 | 0.7974 | 4,917 |
| Pultusk | 2,045 | 1,732 | 0.8469 | 5,003 |
|  | 2,180 | 1,820 | 0.8349 | 4,982 |

## U-Pb and ${ }^{207} \mathrm{~Pb}^{-{ }^{206}} \mathbf{P b}$ ages of Eucrites

This dating was done in 2005 by scientists from the Antarctic Meteorite Research Centre, Tokyo, Japan. ${ }^{91}$ Several dates ${ }^{92}$ give ages much greater than the "absolute age" of 4.5 billion years for the age of the Solar System.

Table 44

| Meteorite | Maximum | Minimum | Average |
| :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years |
| Yamato-75011 | $\mathbf{5 , 0 7 0}$ | $\mathbf{4 , 5 4 8}$ | $\mathbf{4 , 8 6 3}$ |
| Yamato- | $\mathbf{5 , 3 0 0}$ | $\mathbf{4 , 6 1 3}$ | $\mathbf{4 , 8 9 9}$ |
| $\mathbf{7 9 2 5 1 0}$ | $\mathbf{4 , 8 2 5}$ | $\mathbf{3 , 8 4 7}$ | $\mathbf{4 , 4 0 4}$ |
| Asuka-881388 | $\mathbf{4 , 9 1 1}$ | $\mathbf{4 , 5 6 9}$ | $\mathbf{4 , 6 7 3}$ |
| Asuka-881467 | $\mathbf{5 , 2 2 3}$ | $\mathbf{3 , 1 0 2}$ | $\mathbf{4 , 5 3 7}$ |
| Padvalninkai |  |  |  |

## ${ }^{40} \mathrm{Ar}^{3}{ }^{39} \mathrm{Ar}$ Dating Of Desert Meteorites

Dated in 2005 by scientists ${ }^{93}$ from Germany and Russia, these meteorite samples gave astounding results. Many dates were older than the evolutionist age of the Solar System. ${ }^{94}$

Table 45

| Sample Name | Million Years |
| :---: | :---: |
| Table A1. Dhofar 007 whole rock. | $\mathbf{7 , 6 3 2}$ |
|  | $\mathbf{6 , 0 3 3}$ |
|  | $\mathbf{5 , 4 9 8}$ |
| Table A2. Dhofar 007 plagioclase. | $\mathbf{7 , 5 8 2}$ |
|  | $\mathbf{7 , 0 1 1}$ |
|  | $\mathbf{4 , 7 5 3}$ |
|  | $\mathbf{4 , 7 4 1}$ |
| Table A3. Dhofar 300 whole rock. | $\mathbf{9 , 0 1 5}$ |
|  | $\mathbf{8 , 4 8 5}$ |
|  | $\mathbf{5 , 5 1 6}$ |
|  | $\mathbf{5 , 1 3 7}$ |
| Table A5. Dhofar 300 pyroxene | $\mathbf{8 , 9 5 7}$ |
|  | $\mathbf{6 , 0 6 4}$ |
|  | $\mathbf{5 , 6 5 6}$ |
|  | $\mathbf{4 , 9 9 8}$ |
| Table A5. Dhofar 300 plagioclase. | $\mathbf{4 , 7 2 0}$ |
|  | $\mathbf{9 , 6 8 0}$ |
|  | $\mathbf{5 , 7 9 3}$ |
|  | $\mathbf{5 , 7 2 1}$ |
|  | $\mathbf{5 , 3 9 5}$ |
|  | $\mathbf{5 , 0 3 5}$ |
|  |  |

## Northwest Africa 482

These meteorites were dated in 2002 by scientists from the Lunar and Planetary Laboratory, University of Arizona, Tucson, Arizona. ${ }^{95}$ Many dates were older than the evolutionist age of the Solar System. ${ }^{96}$

Table 46

| Bulk Sample | Million Years |
| :---: | :---: |
|  | $\mathbf{9 , 6 7 0}$ |
|  | $\mathbf{8 , 5 6 0}$ |
|  | $\mathbf{8 , 1 2 7}$ |
|  | $\mathbf{6 , 2 5 6}$ |
| Glass Sample | Million Years |
|  | $\mathbf{9 , 9 0 5}$ |
|  | $\mathbf{7 , 3 8 8}$ |
|  | $\mathbf{5 , 7 0 8}$ |

## Conclusion

Brent Dalrymple states in his anti creationist book The Age of the Earth: "Several events in the formation of the Solar System can be dated with considerable precision." ${ }^{97}$

Looking at some of the dating it is obvious that precision is much lacking. He then goes on: "Biblical chronologies are historically important, but their credibility began to erode in the eighteenth and nineteenth centuries when it became apparent to some that it would be more profitable to seek a realistic age for the Earth through observation of nature than through a literal interpretation of parables." 98

I his book he gives a table ${ }^{99}$ with radiometric dates of twenty meteorites. If you run the figures through Microsoft Excel, you will find that they are $98.7 \%$ in agreement. There is only a seven percent difference between the ratio of the smallest and oldest dates. As we have seen in this essay, such a perfect fit is attained by selecting data and ignoring other data. A careful study of the latest research shows that such perfection is illusionary at best.

The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary.

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# Rocks With Negative Dates 

By Paul Nethercott
August 2013

## Introduction

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." 4 "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

Evolutionists give the age of the galaxy as " 11 to 13 billion years for the age of the Milky Way Galaxy." ${ }^{1,7}$ Let us remember this as we look at the following dating as given in secular science journals.

## 1. Ion Microprobe U-Pb Dating

These rocks from Japan were dated ${ }^{8}$ in 2001 using the Rubidium/Strontium and Potassium/Argon method. If we run the isotopic ratios through Isoplot ${ }^{9}$ and use formulas listed in standard geology books ${ }^{10}$ we find that the rock samples ${ }^{11}$ gave ages between 5 billion years and negative years old! Since the Earth exists in the present how can rocks have formed in the future? How can a rock be older than the Earth? The author admits some of the dates are negative: "Though a negative age has no practical use, it does suggest that it is younger than 0.12 Ma." ${ }^{12}$

Table 1

| Table 2 | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| Data | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | Ratio |
| Average | $\mathbf{6 2}$ | $\mathbf{4 , 7 1 0}$ | $\mathbf{7 6}$ |
| Maximum | $\mathbf{6 3 1}$ | $\mathbf{5 , 1 3 5}$ | $\mathbf{8}$ |
| Minimum | $\mathbf{0}$ | $\mathbf{3 , 7 7 1}$ | $\mathbf{3 7 7 1}$ |

Table 2

| Table 3 | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| Data | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | Ratio |
| Average | $\mathbf{0 . 8 8}$ | 4,742 | 5,388 |
| Maximum | 2.91 | 4,978 | $\mathbf{1 , 7 1 0}$ |
| Minimum | $\mathbf{0 . 2 5}$ | $\mathbf{4 , 4 7 9}$ | $\mathbf{1 7 , 9 1 6}$ |

## 2. The Long Valley Rhyolitic

These rocks from California were dated ${ }^{13}$ in 1997 using the Rubidium/Strontium and Potassium/Argon method. The rock samples gave ages between 1 million years and negative years old! Since the Earth exists in the present how can rocks have formed in the future? The author admits some of the dates are negative:
"The negative ages are a clear indication that some phases have not reached Sr isotope equilibration with their current host glass." ${ }^{14}$
"In contrast, feldspars from the second group yield mineral ages that are geologically unreasonable ranging from close to the eruption age of the Bishop Tuff to negative ages." ${ }^{15}$

## 3. Rn-Generated 206Pb

These rocks from South Africa were dated ${ }^{16}$ in 1998 using the Uranium/Lead method. When we run the ratios ${ }^{17}$ through Isoplot the rock samples gave ages between 543 and 6,400 million years old! Since the Earth exists in the present how can rocks have formed in the future? How can a rock be older than the Earth? According to the article the true age is between 2 and 2.6 billion years old: "Assigning a 2.02 Ga age of mineralization and constructing secondary isochrons for paragenetically early galena and chalcopyrite, ages of the source uraninite are calculated as 2.6-2.4 Ga." ${ }^{18}$

| Table 3 |  |
| :---: | :---: |
| Age | Age |
| Pb 207/206 | Pb 207/206 |
| 6451 | 5799 |
| 6330 | 5763 |
| 6315 | 5735 |
| 6217 | 5723 |
| 6109 | 5711 |
| 6009 | 4966 |

The author admits some of the dates are negative: "Analyses lying even farther to the fight, with the implication of implausibly young and even negative ages, force us to consider alternative explanations for this subsidiary array." ${ }^{19}$

## 4. 40Argon/39 Argon Age of a Tholeiitic Basalt

These rocks from California were dated ${ }^{20}$ in 2006 using the Argon method. The rock samples gave ages ${ }^{21}$ between 2,357 and -579 thousand years old! Since the Earth exists in the present how can rocks have formed in the future?

Table 4

| Sample | Minimum | Maximum | Difference | Ratio |
| :--- | :---: | :---: | :---: | :---: |
| Cinder Butte | -579.3 | 56.7 | 636 | $1,022 \%$ |
| Andesite of Sugarloaf Peak | 14.7 | 589.5 | 636 | $4,010 \%$ |
| Little Potato Butte | -51.6 | 585.9 | 637.5 | $1,135 \%$ |
| Andesite of Potato Butte 1 | -386.3 | 164.5 | 550.8 | $235 \%$ |
| Andesite of Potato Butte 2 | -289.6 | 2357.4 | 2647 | $\mathbf{8 1 4 \%}$ |
| Hat Creek Basalt 1 | 10 | 2950 | 2647 | $29,500 \%$ |
| Hat Creek Basalt 2 | $-\mathbf{8 9 . 3}$ | $\mathbf{9 2 . 4}$ | 181.7 | $103 \%$ |

The author admits some of the dates are negative: "The Ar isotopic data, when cast on an inverse isochron diagram, indicate that the first two steps are enriched in 36Ar and thus yield negative ages. These first two steps are most likely influenced by low-temperature alteration of the sample." ${ }^{22}$

## 5. Isotopic Systematics of Ultramafic Xenoliths

These rocks from North China were dated ${ }^{23}$ in 2007 using the Rubidium/Strontium and Uranium/Lead methods. The rock samples gave ages ${ }^{24}$ between -3 and 9 billion years old! Since the Earth exists in the present how can rocks have formed in the future? How can a rock be 4.5 billion years older than the Earth? The author admits some of the dates are negative: "The Nd model ages for the individual data points are variable, from $\sim 2.8 \mathrm{Ga}$ to negative ages (Table 3), consistent with our earlier observation that REE patterns for all the samples display some degree of secondary metasomatic overprinting by LREE-enriched silicate melts." $\underline{25}$

If we run the isotopic ratios ${ }^{24}$ through Isoplot we get the ages listed in table 6 . There is a $\mathbf{1 2 , 6 9 8}$ million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.

Table 5

| Million Years |  |
| :---: | :---: |
| $-3,209$ | Million Years |
| $-1,747$ | $\mathbf{9 6 5}$ |
| 136 | 4,803 |
| 530 | 7,935 |
| 600 |  |

Table 6

| $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ |
| :---: | :---: |
| $\mathbf{5 , 0 4 9}$ | $\mathbf{9 , 4 8 9}$ |
| $\mathbf{5 , 0 3 5}$ | $\mathbf{1 , 8 2 1}$ |
| $\mathbf{5 , 0 3 4}$ | $\mathbf{3 3 8}$ |
| $\mathbf{5 , 0 2 9}$ | $\mathbf{9 5}$ |
| $\mathbf{5 , 0 1 2}$ |  |
| $\mathbf{5 , 0 0 9}$ |  |
| $\mathbf{5 , 0 0 6}$ |  |
| $\mathbf{5 , 0 0 4}$ |  |

## 6. Timing of Precambrian Melt Depletion

These rocks from Wyoming were dated ${ }^{26}$ in 2003 using the Rubidium/Strontium and Neodymium/Samarium method. The rock samples [Tables $7 \& 8$ ] gave ages ${ }^{27}$ between -2 and 50 billion years old! Since the Earth exists in the present how can rocks have formed in the future? How can a rock be 35 billion years older than the Big Bang explosion? The author admits some of the dates are negative: "That complete equilibrium was not achieved during this interaction is shown by the fact that the garnet-clinopyroxene tie lines for the different radiometric systems in the same sample do not provide ages that agree, and in the case of two of the Williams samples the $\mathrm{Sm}-\mathrm{Nd}$ tie lines provide negative ages (Carlson et al., 1999a)." 28

Table 7

| Billion Years | Billion Years |
| :---: | :---: |
| -1.24 | 6 |
| -1.24 | 7.46 |
| -0.22 | 47.37 |
| 4.54 | 49.63 |

There is a 51,970 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.
Table 8

| Billion Years | Billion Years |
| :---: | :---: |
| -2.34 | -4.24 |
| -1.75 | -1.47 |
| -0.98 | -1.14 |
| -0.86 | -0.84 |
| 4.47 | 2.51 |

If we run the Lead 207/206 ratios ${ }^{29}$ through Isoplot we find that the rocks are 5 billion years old.

Table 9

| Average |  |
| :---: | :---: |
| Maximum | $\mathbf{4 , 9 3 5}$ |
| Minimum | $\mathbf{4 , 4 2 1}$ |

The author claims that the true age is just 2.6 billion years old: "The mean TMA of these five samples is 2.86 Ga ( or 3.07 Ga without the apparently younger sample HK1-24), and given the lower bound mean TRD age of 2.61 Ga , a depletion age in the late Archean seems likely." ${ }^{30}$

## 7. Re-Os, Sm-Nd, and Rb-Sr Isotope Evidence

These rocks from Uganda were dated ${ }^{31}$ in 1993 using the Rubidium/Strontium and Neodymium/Samarium methods. Since the Earth exists in the present how can rocks have formed in the future? How can a rock be 6 billion years older than the Earth? The author admits some of the dates are negative:
"If Re-Os model ages are calculated using the conventional model age approach, i.e., using the measured Re/Os and osmium isotope composition in comparison to some model for bulk-Earth osmium isotope evolution, several peridotites yield negative ages, or ages that are considerably older than the Earth (Table 5). This indicates that some peridotites cannot have evolved as closed systems."

If we run the Osmium isotope ratios ${ }^{33}$ through Microsoft Excel we get the following results.
Table 10

| Million Years |  |
| :---: | :---: |
| $-1,584$ | Million Years |
| $-1,504$ | -6.46 |
| -478 | -1.58 |
| -35 | -0.73 |
| -19 | 2.23 |

1870s/186Os Ages
The rock samples below gave ages ${ }^{32}$ between -1.5 and 11 billion years old!
Table 11

| Sm-Nd | Rb-Sr | \% Ratio |
| :---: | :---: | :---: |
| 258 | 5,454 | 2,114 |
| 959 | 6,245 | 651 |
| 434 | 12,716 | 2,930 |
| 2,038 | 1,351 | 66 |
| 1,157 | 4,026 | 348 |

Table 12

| $\mathrm{Re} / \mathrm{Os}$ | $\mathrm{Sm} / \mathrm{Nd}$ | $\mathrm{Rb} / \mathrm{Sr}$ |
| :---: | :---: | :---: |
| 5.5 | 3.2 | 8.3 |
| 11 | 3 | 0.99 |
| 6.9 | 3 |  |
| 6.6 | 2.7 |  |
| 6 Negative | 4 Negative | 7 Negative |

There is a 14,300 million year spread of dates between the youngest [Negative] and the oldest [Positive] ages.

## Conclusion

Yuri Amelin states in the journal Elements that radiometric dating is extremely accurate: "However, four 238U/235U-corrected CAI dates reported recently (Amelin et al. 2010; Connelly et al. 2012) show excellent agreement, with a total range for the ages of only 0.2 million years - from $4567.18 \pm 0.50 \mathrm{Ma}$ to $4567.38 \pm 0.31$ Ma." ${ }^{34-36}$

To come within 0.2 million years out of 4567.18 million years means an accuracy of $99.99562 \%$. Looking at some of the dating it is obvious that precision is much lacking. The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in radiometric dating is selectively taken to suit and ignores data to the contrary.

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# The Neodymium-Samarium Dating Method 

By Paul Nethercott October 2012

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." ${ }^{4}$ "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

If we run the isotopic ratios give in standard geology magazines through the computer program Isoplot ${ }^{7}$ we find that the Uranium/Thorium/Lead isotopic ratios in the rocks disagree radically with the Rubidium $/ \mathrm{Strontium}$ ages. $\mathrm{The} \mathrm{U} / \mathrm{Th} / \mathrm{Pb}$ ratios give ages older than the evolutionist age of the Earth, Solar System, Galaxy and Universe. How can Earth rocks be dated as being older than the Big Bang?

If we use isotopic formulas ${ }^{8-11}$ given in standard geology text we can arrive at ages from the Rubidium/Strontium and Neodymium/Samarium ratios. The formula for Rubidium/Strontium age is given as:
$t=\frac{2.303}{\lambda} \log \left(\frac{(87 S r / 86 S r)-(87 S r / 86 S r)_{0}}{(87 R b / 86 S r)}+1\right)$

Where $t$ equals the age in years. $\square$ equals the decay constant. $(87 \mathrm{Sr} / 86 \mathrm{Sr})=$ the current isotopic ratio. $(87 \mathrm{Sr} / 86 \mathrm{Sr})_{0}=$ the initial isotopic ratio. $(87 \mathrm{Rb} / 86 \mathrm{Sr})=$ the current isotopic ratio. The same is true for the formula below.
$t=\frac{2.303}{\lambda} \log \left(\frac{(143 N d / 144 N d)-(143 N d / 144 N d)_{0}}{(147 S m / 144 N d)}+1\right)$
Here are examples of isotopic ratios taken from several articles in major geology magazines which give absolutely absurd dates.

## Rocks of the Central Wyoming Province

These rock samples were dated in 2005 by scientists from the University of Wyoming. ${ }^{12}$ If we run the Rubidium/Strontium and Neodymium/Samarium isotope ratios ${ }^{13}$ from the article through Microsoft Excel we get the following values:

1. Ages Dating Summary

| Dating | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ | $\mathbf{1 4 7 S m} / \mathbf{1 4 4 N d}$ | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ |
| Average | $\mathbf{2 , 8 6 3}$ | $\mathbf{2 , 8 6 9}$ | $\mathbf{5 , 1 2 3}$ | $\mathbf{1 7 , 8 9 9}$ | $\mathbf{1 1 , 9 0 6}$ |
| Maximum | $\mathbf{2 , 9 5 2}$ | $\mathbf{2 , 9 5 4}$ | $\mathbf{5 , 2 9 4}$ | $\mathbf{3 8 , 7 4 6}$ | $\mathbf{1 8 , 9 8 5}$ |
| Minimum | $\mathbf{2 , 6 3 0}$ | $\mathbf{2 , 6 3 1}$ | $\mathbf{4 , 6 6 2}$ | $\mathbf{6 , 6 5 0}$ | $\mathbf{7 , 2 9 4}$ |
| Std Deviation | $\mathbf{3 8}$ | $\mathbf{3 9}$ | $\mathbf{1 5 2}$ | $\mathbf{9 , 7 5 4}$ | $\mathbf{3 , 2 9 8}$ |

The Uranium/Lead dates ${ }^{14}$ are up to sixteen billion years older than the Rubidium/Strontium and Neodymium/Samarium dates. The Thorium/Lead dates are up to thirty six billion years older. The so called true age is just a guess.

## Correlated Nd, Sr And Pb Isotope Variation

According to the article ${ }^{15}$ this specimen [Walvis Ridge, Walvis Bay] was dated in 1982 by scientists from the Massachusetts Institute of Technology, and the Department of Geochemistry, University of Cape Town, South Africa. According to the article ${ }^{16}$ the age of the sample is 70 million years. If we run the various isotope ratios ${ }^{16}$ from the article through Microsoft Excel we get the following values respectively:

## 2. Age Dating Summary

| Summary | Pb207/Pb206 | 147Sm/144Nd | 87Rb/86Sr |
| :---: | :---: | :---: | :---: |
| Average | 5,033 | 70 | 64 |
| Maximum | 5,061 | 70 | 93 |
| Minimum | 5,004 | 69 | 0 |
| Difference | 57 | 140 | 93 |

## A Depleted Mantle Source For Kimberlites

According to the article ${ }^{17}$ this specimen [kimberlites from Zaire] was dated in 1984 by scientists from Belgium. According to the article ${ }^{18}$ the age of the samples is 70 million years. If we run the various isotope ratios ${ }^{19}$ from the article through Microsoft Excel we get the following values respectively:
3. Age Dating Summary

| Summary | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $\mathbf{8 7 R b} / 86 \mathrm{Sr}$ | $147 \mathrm{Sm} / 144 \mathrm{Nd}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | 4,977 | 4,810 | 86 | 72 |
| Maximum | 5,017 | 10,870 | 146 | 80 |
| Minimum | 4,909 | 1,391 | 50 | 63 |
| Difference | 108 | 9,478 | 196 | 17 |

The $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ maximum age is 34 times older than the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ maximum age. The $206 \mathrm{~Pb} / 238 \mathrm{U}$ maximum age is 74 times older than the $147 \mathrm{Sm} / 144 \mathrm{Nd}$ maximum age. There is a 10.8 billion year difference between the oldest and youngest age attained.

## Sm-Nd Isotopic Systematics

According to the article ${ }^{20}$ this specimen [Enderby Land, East Antarctic] was dated in 1984 by scientists from the Australian National University, Canberra, and the Bureau of Mineral Resources, Canberra. According to the article ${ }^{20}$ the age of the sample is 3,000 million years. If we run the Rubidium/Strontium isotope ratios ${ }^{21}$ from the article through Microsoft Excel we get the following values respectively:

\section*{4. Rubidium/Strontium Age Dating Summary <br> | Average | $\mathbf{- 8 7 3}$ |
| :---: | :---: |
| Maximum | $\mathbf{3 , 4 8 4}$ |
| Minimum | $\mathbf{- 2 5 , 1 2 1}$ |
| Difference | $\mathbf{2 8 , 6 0 5}$ |}

There is almost a 30 billion year difference between the oldest and youngest dates.

## Strontium, Neodymium And Lead Compositions

According to the article ${ }^{\overline{22}}$ this specimen [Snake River Plain, Idaho] was dated in 1985 by scientists from the Geology Department, Rice University, Houston, Texas, the Earth Sciences Department, Open University, England and the Geology Department, Ricks College, Idaho. According to the article ${ }^{22}$ the age of the sample is 3.4 billion years. If we run the various isotope ratios ${ }^{23}$ from the article through Microsoft Excel we get the following values respectively:

## 5. Age Dating Summary

| Summary | Pb207/Pb206 | Pb207/Pb206 | 87Rb/86Sr |
| :---: | :---: | :---: | :---: |
| Average | $\mathbf{5 , 1 4 3}$ | $\mathbf{5 , 1 3 8}$ | $\mathbf{4 0 , 0 5 2}$ |
| Maximum | $\mathbf{5 , 3 6 2}$ | $\mathbf{5 , 3 1 4}$ | $\mathbf{2 0 5 , 0 9 3}$ |
| Minimum | $\mathbf{4 , 6 9 8}$ | $\mathbf{4 , 9 4 0}$ | $\mathbf{1 , 4 4 3}$ |
| Difference | $\mathbf{6 6 4}$ | $\mathbf{3 7 4}$ | $\mathbf{2 0 3 , 6 5 0}$ |

The Lead isotope ratios from two different tables give dates 200 billion years younger than the Rubidium/Strontium isotope ratios. The Average age of the Rubidium/Strontium isotope ratios is 40 billion years. Below we can see some of the maximum ages and how stupid they are.
6. $87 \mathrm{Rb} / 86 \mathrm{Sr}$, Maximum Ages

| Age | Age |
| :---: | :---: |
| Million Years | Million Years |
| 205,093 | 11,974 |
| 189,521 | 11,908 |
| 188,777 | $\mathbf{9 , 9 6 0}$ |
| 95,450 | $\mathbf{9 , 1 0 1}$ |
| 52,643 | $\mathbf{7 , 1 2 4}$ |
| 13,119 | $\mathbf{6 , 0 2 2}$ |
| 12,220 | 5,089 |

## Sr, Nd, and Os Isotope Geochemistry

According to the article ${ }^{24}$ this specimen [Camp Creek area, Arizona] was dated in 1987 by scientists from The University of Tennessee, the University of Michigan, the University of California, Leeds University, and the University of Chicago. According to the article ${ }^{25}$ the age of the samples is 120 million years. If we run the various isotope ratios ${ }^{26}$ from two different tables in the article through Microsoft Excel we get the following values respectively:
7. Rubidium/Strontium and Sm/Nd Age Dating Summary

| Summary | $87 \mathrm{Rb} / 86 \mathrm{Sr}$ | $\mathbf{8 7 \mathrm { Rb } / 8 6 \mathrm { Sr }}$ | $147 \mathrm{Sm} / 144 \mathrm{Nd}$ | $147 \mathrm{Sm} / 144 \mathrm{Nd}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | 310 | 103 | 120 | 159 |
| Maximum | 1,092 | 207 | 123 | 400 |
| Minimum | 0 | 0 | 120 | 119 |
| Difference | 1,092 | 207 | 3 | 281 |

The author's choice of 120 million years is just a guess.

## $\mathrm{Pb}, \mathrm{Nd}$ and Sr Isotopic Geochemistry

According to the article ${ }^{27}$ this specimen [Bellsbank kimberlite, South Africa] was dated in 1991 by scientists from the University Of Rochester, New York, Guiyang University in China, and the United States Geological Survey, Colorado. According to the article ${ }^{67}$ the age of the samples is just 1 million years. If we run the various isotope ratios ${ }^{68}$ from two different tables in the article through Microsoft Excel we get the following values respectively:

| 8. Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Table | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 87Rb/86Sr |
| Summaries | Age | Age | Age | Age |
| Average | 5,057 | 5,092 | $\mathbf{1 0 , 1 8 2}$ | $\mathbf{- 1 , 5 0 2}$ |
| Maximum | $\mathbf{5 , 1 2 0}$ | $\mathbf{8 , 5 8 4}$ | $\mathbf{1 7 , 1 7 1}$ | $\mathbf{0}$ |
| Minimum | $\mathbf{5 , 0 0 2}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{- 3 , 5 9 3}$ |
| Difference | $\mathbf{1 1 8}$ | $\mathbf{8 , 5 8 4}$ | $\mathbf{1 7 , 1 7 1}$ | $\mathbf{3 , 5 9 3}$ |

In tables 9 to 12 we can see some of the astounding spread of dates [million of years]. The oldest date is over 17 billion years old. The youngest is less than negative 3.5 billion years. The difference between the two is over 20 billion years. According to the article the true age of the rock is just one million years old!
9. 208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 7 , 1 7 1}$ | $\mathbf{1 3 , 3 2 2}$ | $\mathbf{9 , 7 3 7}$ | $\mathbf{7 , 9 6 8}$ |
| $\mathbf{1 5 , 3 4 3}$ | 13,202 | $\mathbf{9 , 7 0 7}$ | $\mathbf{7 , 8 3 0}$ |
| $\mathbf{1 5 , 2 9 9}$ | 13,001 | $\mathbf{9 , 0 4 9}$ | $\mathbf{7 , 2 5 0}$ |
| 15,136 | 11,119 | 8,420 | $\mathbf{6 , 9 7 2}$ |
| 15,054 | 10,873 | 8,419 | $\mathbf{6 , 6 2 8}$ |
| 13,476 | 10,758 | 8,368 | $\mathbf{6 , 5 7 7}$ |

10. 206Pb/238U, Maximum Ages

| Age | Age | Age |
| :---: | :---: | :---: |
| $\mathbf{8 , 5 8 4}$ | $\mathbf{6 , 6 5 6}$ | $\mathbf{5 , 5 7 6}$ |
| $\mathbf{7 , 9 7 5}$ | $\mathbf{6 , 6 5 4}$ | $\mathbf{5 , 5 2 0}$ |
| $\mathbf{7 , 3 1 4}$ | $\mathbf{6 , 5 1 8}$ | $\mathbf{5 , 2 8 5}$ |
| $\mathbf{7 , 1 8 4}$ | $\mathbf{6 , 4 4 8}$ | $\mathbf{5 , 1 5 9}$ |
| $\mathbf{6 , 8 6 1}$ | $\mathbf{5 , 7 5 8}$ | $\mathbf{5 , 0 9 9}$ |

11. Pb 207/206, Maximum Ages

| 11. Pb 207/206, Maximum Ages |  |  |  |
| :---: | :---: | :---: | :---: |
| Age | Age | Age | Age |
| $\mathbf{5 , 1 2 0}$ | $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 0}$ | $\mathbf{5 , 0 4 9}$ |
| $\mathbf{5 , 1 0 9}$ | $\mathbf{5 , 0 6 6}$ | $\mathbf{5 , 0 5 9}$ | $\mathbf{5 , 0 4 5}$ |
| $\mathbf{5 , 0 9 7}$ | $\mathbf{5 , 0 6 6}$ | $\mathbf{5 , 0 5 1}$ | $\mathbf{5 , 0 4 4}$ |
| $\mathbf{5 , 0 7 7}$ | $\mathbf{5 , 0 6 5}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 4 4}$ |
| $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 2}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 3 3}$ |
| $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 0}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 2 2}$ |

12. $87 \mathrm{Rb} / 86 \mathrm{Sr}$, Minimum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $-3,593$ | $-2,981$ | $-1,917$ | $-1,323$ |
| $-3,231$ | $-2,725$ | $-1,611$ | $-1,245$ |
| $-3,089$ | $-2,050$ | $-1,499$ | $-1,229$ |
| $-3,067$ | $-1,926$ | $-1,370$ | $-1,194$ |

## $\underline{\mathrm{Sr}, \mathrm{Nd}, \text { and } \mathrm{Pb} \text { isotopes }}$

According to the article ${ }^{30}$ this specimen [eastern China] was dated in 1992 by scientists from the University Of Rochester, New York, Guiyang University in China, and the United States Geological Survey, Colorado. According to
the article: "Observed high $\mathrm{Th} / \mathrm{U}, \mathrm{Rb} / \mathrm{Sr}, 87 \mathrm{Sr} / 86 \mathrm{Sr}$ and Delta 208, low $\mathrm{Sm} / \mathrm{Nd}$ ratios, and a large negative Nd in phlogopite pyroxenite with a depleted mantle model age of 2.9 Ga , support our contention that metasomatized continental lower mantle lithosphere is the source for the EMI component." ${ }^{30}$ If we run the various isotope ratios ${ }^{31}$ from two different tables in the article through Isoplot we get the following values respectively:
13. Age Dating Summary

| Dating | 232Th/208Pb | 206Pb/238U | 207Pb/206Pb |
| :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age |
| Average | $\mathbf{1 4 , 1 9 8}$ | $\mathbf{7 , 3 6 6}$ | $\mathbf{5 , 0 1 4}$ |
| Maximum | $\mathbf{9 4 , 3 9 6}$ | $\mathbf{2 2 , 2 0 1}$ | $\mathbf{5 , 0 7 7}$ |
| Minimum | $\mathbf{7 9}$ | $\mathbf{1 , 1 1 7}$ | $\mathbf{4 , 9 4 5}$ |
| Difference | $\mathbf{9 4 , 3 1 7}$ | $\mathbf{2 1 , 0 8 3}$ | $\mathbf{1 3 1}$ |

If the true age is 2.9 billion years why so much discordance? In tables 14 and 15 we can see some of the astounding spread of dates [million of years]. The oldest date is over 94 billion years old. The youngest is 79 million years. The difference between the two is over 94 billion years. The oldest date is 1,194 times older than the youngest. According to the article the true age of the rock is 2.9 billion years old!
14. 208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{9 4 , 3 9 6}$ | $\mathbf{3 9 , 2 6 7}$ | $\mathbf{1 0 , 5 9 5}$ | $\mathbf{8 , 1 7 1}$ |
| $\mathbf{9 0 , 6 8 3}$ | $\mathbf{2 6 , 2 6 6}$ | $\mathbf{1 0 , 2 8 4}$ | $\mathbf{7 , 7 8 9}$ |
| $\mathbf{7 4 , 6 3 9}$ | $\mathbf{1 8 , 3 3 4}$ | $\mathbf{9 , 3 2 8}$ | $\mathbf{7 , 6 3 8}$ |
| $\mathbf{5 8 , 1 5 3}$ | $\mathbf{1 6 , 3 5 7}$ | $\mathbf{8 , 8 2 1}$ | $\mathbf{7 , 3 7 5}$ |
| $\mathbf{5 5 , 3 2 4}$ | $\mathbf{1 4 , 2 5 0}$ | $\mathbf{8 , 7 7 1}$ | $\mathbf{7 , 3 1 7}$ |
| $\mathbf{4 5 , 2 4 2}$ | $\mathbf{1 1 , 2 1 5}$ | $\mathbf{8 , 4 0 3}$ | $\mathbf{5 , 7 5 9}$ |

15. 206Pb/238U, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 2 , 2 0 1}$ | $\mathbf{9 , 8 7 8}$ | $\mathbf{7 , 3 4 8}$ | $\mathbf{5 , 7 4 6}$ |
| 21,813 | $\mathbf{9 , 6 5 6}$ | $\mathbf{7 , 3 3 5}$ | $\mathbf{5 , 7 0 0}$ |
| $\mathbf{1 9 , 3 2 0}$ | $\mathbf{9 , 0 5 4}$ | $\mathbf{7 , 2 4 9}$ | $\mathbf{5 , 2 1 8}$ |
| $\mathbf{1 6 , 6 5 6}$ | $\mathbf{8 , 2 4 2}$ | $\mathbf{7 , 2 0 2}$ | $\mathbf{5 , 2 0 1}$ |
| $\mathbf{1 6 , 2 0 0}$ | $\mathbf{8 , 0 4 4}$ | $\mathbf{7 , 0 1 9}$ | $\mathbf{5 , 1 6 3}$ |
| $\mathbf{1 4 , 7 4 8}$ | $\mathbf{7 , 9 9 6}$ | $\mathbf{6 , 9 2 3}$ | $\mathbf{5 , 1 5 9}$ |
| $\mathbf{1 3 , 6 0 7}$ | $\mathbf{7 , 5 9 0}$ | $\mathbf{6 , 8 4 8}$ | $\mathbf{5 , 0 9 9}$ |
| $\mathbf{1 1 , 2 5 6}$ | $\mathbf{7 , 4 2 2}$ | $\mathbf{6 , 2 9 2}$ | $\mathbf{4 , 8 1 2}$ |

## An Extremely Low U/Pb Source

According to the article ${ }^{32}$ this specimen [lunar meteorite] was dated in 1993 by scientists from the United States Geological Survey, Colorado, the United States Geological Survey, California and The National Institute of Polar Research, Tokyo. According to the article: "The $\mathrm{Pb}-\mathrm{Pb}$ internal isochron obtained for acid leached residues of separated mineral fractions yields an age of $3940 \pm 28 \mathrm{Ma}$, which is similar to the $\mathrm{U}-\mathrm{Pb}(3850 \pm 150 \mathrm{Ma})$ and $\mathrm{Th}-\mathrm{Pb}(3820 \pm 290$ Ma) internal isochron ages. The $\mathrm{Sm}-\mathrm{Nd}$ data for the mineral separates yield an internal isochron age of $3871 \pm 57 \mathrm{Ma}$ and an initial $143 \mathrm{Nd} / \mathrm{I} 44 \mathrm{Nd}$ value of $0.50797 \pm 10$. The Rb-Sr data yield an internal isochron age of $3840 \pm 32 \mathrm{Ma}$." ${ }^{32}$ If we run the various isotope ratios ${ }^{33}$ from two different tables in the article through Isoplot we get the following values respectively:
16. Rubidium/Strontium Age Dating Summary

| Average | $\mathbf{3 , 6 1 9}$ |
| :---: | :---: |
| Maximum | $\mathbf{5 , 3 8 5}$ |
| Minimum | $\mathbf{7 2 1}$ |
| Difference | $\mathbf{4 , 6 6 4}$ |

17. Uranium Age Dating Summary

| Table | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 207Pb/235U |
| :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age |
| Average | $\mathbf{4 , 6 7 3}$ | $\mathbf{8 , 0 3 5}$ | $\mathbf{1 0 , 1 4 8}$ | $\mathbf{4 , 5 4 6}$ |
| Maximum | $\mathbf{5 , 0 1 8}$ | $\mathbf{5 6 , 9 2 3}$ | $\mathbf{6 5 , 2 8 6}$ | $\mathbf{8 , 1 2 8}$ |
| Minimum | $\mathbf{3 , 9 6 1}$ | $\mathbf{1 , 4 7 7}$ | $\mathbf{2 , 5 4 2}$ | $\mathbf{2 , 7 8 4}$ |
| Difference | $\mathbf{1 , 0 5 7}$ | $\mathbf{5 5 , 4 4 5}$ | $\mathbf{6 2 , 7 4 4}$ | $\mathbf{5 , 3 4 4}$ |

The article claims that the Rubidium/Strontium age is 3.8 billion years for this meteorite. If that is the true age why are all the Uranium/Thorium/Lead dates ${ }^{76}$ so stupid? Or are they right and the Rubidium/Strontium is wrong?
18. 208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{6 5 , 2 8 6}$ | $\mathbf{1 4 , 4 3 0}$ | $\mathbf{9 , 0 9 4}$ | $\mathbf{5 , 4 0 1}$ |
| $\mathbf{3 3 , 8 9 8}$ | $\mathbf{1 4 , 4 1 0}$ | $\mathbf{6 , 5 2 0}$ | $\mathbf{5 , 3 9 6}$ |
| $\mathbf{2 5 , 0 1 3}$ | $\mathbf{1 3 , 1 0 7}$ | $\mathbf{6 , 1 6 6}$ | $\mathbf{5 , 3 6 5}$ |
| $\mathbf{2 2 , 1 7 8}$ | $\mathbf{1 2 , 7 3 8}$ | $\mathbf{6 , 1 2 1}$ | $\mathbf{5 , 0 9 8}$ |
| $\mathbf{2 1 , 2 0 4}$ | $\mathbf{1 1 , 6 4 1}$ | $\mathbf{5 , 6 7 1}$ | $\mathbf{5 , 0 3 5}$ |
| $\mathbf{1 7 , 6 1 1}$ | $\mathbf{1 1 , 1 7 4}$ | $\mathbf{5 , 4 0 8}$ | $\mathbf{4 , 6 7 8}$ |

19. 206Pb/238U, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 6 , 9 2 3}$ | $\mathbf{1 0 , 8 9 5}$ | $\mathbf{6 , 7 6 4}$ | $\mathbf{5 , 7 7 7}$ |
| 27,313 | $\mathbf{1 0 , 2 7 8}$ | $\mathbf{6 , 6 7 0}$ | $\mathbf{5 , 6 2 5}$ |
| $\mathbf{1 7 , 8 7 3}$ | $\mathbf{9 , 6 5 3}$ | $\mathbf{6 , 4 4 9}$ | $\mathbf{5 , 6 0 2}$ |
| $\mathbf{1 3 , 6 8 0}$ | $\mathbf{8 , 0 0 9}$ | $\mathbf{6 , 4 3 6}$ | $\mathbf{5 , 2 7 8}$ |
| $\mathbf{1 3 , 6 2 3}$ | $\mathbf{7 , 3 9 5}$ | $\mathbf{6 , 0 7 0}$ | $\mathbf{5 , 1 4 7}$ |

## The 72 Ma Geochemical Evolution

According to the article ${ }^{34}$ this specimen [Madeira Archipelago] was dated in 2000 by scientists from Germany. The average Lead date is 705 times older than the average Rubidium date. The true age is claimed to be 430 million years old. ${ }^{34}$ If we run the various isotope ratios ${ }^{35}$ from two different tables in the article through Isoplot we get the following values respectively:
20. Age Dating Summary

| Table | 207Pb/206Pb | 87Rb/86Sr | 147Sm/144Nd |
| :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age |
| Average | 4,938 | 7 | 10 |
| Maximum | 5,199 | 55 | 164 |
| Minimum | 4,898 | -4 | 0 |
| Difference | 302 | 59 | 164 |

If the true age is 430 million years than none of the dating methods are even vaguely close. The oldest date is 731 times older than the youngest.

## Temporal Evolution of the Lithospheric Mantle

According to the article ${ }^{36}$ this specimen from the Eastern North China Craton was dated in 2009 by scientists from China, USA and Australia. Various tables ${ }^{37}$ in the essay have either calculated dates or ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates over a 32 billion year range.

| 21. Age Dating Summary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Table | 147Sm/144Nd | 176Lu/176Hf | 187Re/188Os | 87Rb/86Sr |  |
| Summaries | Age | Age | Age | Age |  |
| Average | 291 | -220 | 1,048 | 9 |  |
| Maximum | $\mathbf{3 , 0 7 9}$ | $\mathbf{4 , 1 9 2}$ | 20,710 | 22 |  |
| Minimum | $-3,742$ | $-9,369$ | $-11,060$ | 0 |  |
| Difference | $\mathbf{6 , 8 2 1}$ | 13,561 | 31,770 | 22 |  |

## Geochemistry Of The Jurassic Oceanic Crust

According to the article ${ }^{38}$ this specimen from the Canary Islands was dated in 1998 by scientists from Germany. According to the essay: "An Sm-Nd isochron gives an age of $178 \pm 17 \mathrm{Ma}$, which agrees with the age predicted from paleomagnetic data." ${ }^{38}$ The article places the age in the late Cretaceous period. Various tables ${ }^{39}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates over a 350 billion year range! None of the Lead or Rubidium based dating methods even come vaguely close to a Jurassic age.

| 22. Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Dating | 87Rb/86Sr | 207Pb/206Pb |
| Summary | Age | Age |
| Average | $-\mathbf{1 4 9 , 4 8 8}$ | $\mathbf{4 , 9 7 4}$ |
| Maximum | 51,967 | $\mathbf{5 , 0 2 4}$ |
| Minimum | $\mathbf{- 2 9 9 , 3 4 6}$ | $\mathbf{4 , 8 4 5}$ |
| Difference | $\mathbf{3 5 1 , 3 1 3}$ | $\mathbf{1 7 9}$ |

## Origin Of The Indian Ocean-Type Isotopic Signature

According to the article ${ }^{40}$ this rock formation in the Philippine Sea plate was dated in 1998 by scientists from Department of Geology, Florida International University in Miami. According to the essay the true age is: "Spreading centers in three basins, the West Philippine Basin ( $37-60 \mathrm{Ma}$ ), the Parece Vela Basin (18-31 Ma), and the Shikoku Basin $(17-25 \mathrm{Ma})$ are extinct, and one, the Mariana Trough ( $0-6 \mathrm{Ma}$ ), is active (Figure 1)." ${ }^{40}$ Numerous table and charts affirm this as the true age. ${ }^{41}$ Two tables ${ }^{42}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 100 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 3,971 times older than the youngest date.
23. Age Dating Summary

| Dating | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | 87Rb/86Sr | 147Sm/144Nd | 207Pb/206Pb | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | 208Pb/232Th |
| Average | 42 | 41 | 4,960 | 4,260 | 8,373 |
| Maximum | 55 | 54 | 4,989 | 7,093 | 13,430 |
| Minimum | 19 | 20 | 4,921 | 1,904 | 3,065 |
| Difference | 37 | 33 | 68 | 5,188 | 10,365 |

## $\mathbf{S r}, \mathbf{N d}$, and Pb isotopes in Proterozoic Intrusives

According to the article ${ }^{\overline{43} \text { this specimen from the Grenville Front in Canadian Labrador was dated in } 1986 \text { by scientists }}$ from Lunar and Planetary Institute, Texas, the United States Geological Survey, and the Geological Survey of Canada. According to the essay: "We report $\mathrm{Sr}, \mathrm{Nd}$, and Pb isotopic compositions of mid-Proterozoic anorthosites and related
 Front in Labrador." ${ }^{43}$ The article places the age in the pre Cambrian period. Various tables ${ }^{44}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. If the Uranium/Lead dating method is used to test or calibrate the other methods then they are totally wrong.

| 24. Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Dating | Age | Age |
| Summary | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ | $\mathbf{2 0 7 P b} / \mathbf{2 0 6 P b}$ |
| Average | $\mathbf{1 , 4 3 7}$ | $\mathbf{5 , 1 3 5}$ |
| Maximum | $\mathbf{1 , 5 0 3}$ | $\mathbf{5 , 2 1 8}$ |
| Minimum | $\mathbf{1 , 3 9 5}$ | $\mathbf{4 , 9 3 1}$ |
| Difference | $\mathbf{1 0 8}$ | $\mathbf{2 8 7}$ |

## Age and Isotopic Relationships

According to the article ${ }^{45}$ this rock formation in Antarctica was dated in 1992 by scientists from California and Germany. According to the essay the true age is: "Nevertheless, concordant $\mathrm{Ph}-\mathrm{Pb}$ model ages of pyroxene separates were obtained ( $20^{\prime}$ ): $4.55784 \pm 52 \mathrm{Ga}$ for LEW and $4.55780 \pm 42 \mathrm{Ga}$ for ADOR. ${ }^{45}{ }^{45}$ Several tables ${ }^{46}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at disagreement with each other. The two on the far right show how discordant the best dating evolutionist can offer.
25. Age Dating Summary

| Dating | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | 87Rb/86Sr | 207Pb/206Pb | 207Pb/206Pb | 147Sm/144Nd | 147Sm/144Nd |
| Average | 4,556 | 4,707 | 5,007 | 4,452 | 902 |
| Maximum | 4,610 | 5,002 | 5,110 | 4,497 | 1,428 |
| Minimum | 4,518 | 4,558 | 4,960 | 4,397 | 536 |
| Difference | 92 | 444 | 150 | 101 | 891 |

## The Beni Bousera Ultramafic Complex of Northern Morocco

According to the article ${ }^{47}$ this rock formation in Morocco was dated in 1995 by scientists from New York. According to the essay the true age is: "The data are presented in Table 5. Garnet-clinopyroxene two-point Sm-Nd isochrons from samples Ga and Ii yield ages of $23.0 \pm 7.3 \mathrm{~m} . \mathrm{y}$. and $20.1 \pm 6.9$ m.y." ${ }^{48}$ Several tables ${ }^{49}$ in the essay have isotopic ratios which can be calculated. As we can see below the Rhenium/Osmium gives wildly discordant dates.
26. Rhenium/Osmium Age Dating Summary

| Average | $\mathbf{- 2 7 2 , 4 5 5}$ |
| :---: | :---: |
| Maximum | $\mathbf{- 1 2 4 , 8 8 2}$ |
| Minimum | $-\mathbf{- 3 6 1 , 8 4 2}$ |
| Difference | 236,960 |

## Implications for Banda Arc Magma Genesis

According to the article ${ }^{50}$ this rock formation in the Banda Arc, East Indonesia was dated in 1995 by scientists from University of Utrecht, the Royal Holloway University of London, the Free University of Amsterdam and Comell University. According to the essay the true age is: "In summary, the western part of New Guinea is characterised by Phanerozoic rocks ( $600-0 \mathrm{Ma}$ ) in contrast to the northern part of Australia, which is dominated by Proterozoic rocks
(2200-1400 Ma)." ${ }^{51}$ Several tables ${ }^{52}$ in the essay have isotopic ratios which can be calculated. As we can see below the Lead 207/206 dating method gives wildly discordant dates. How can both methods be so at variance with each other?
27. Lead 207/206 Age Dating Summary

| Average | $\mathbf{4 , 9 7 1}$ |
| :---: | :---: |
| Maximum | $\mathbf{4 , 9 9 1}$ |
| Minimum | $\mathbf{4 , 9 3 3}$ |
| Difference | $\mathbf{5 7}$ |

## $\mathrm{Pb}, \mathrm{Sr}$, and Nd Isotopic Features

According to the article ${ }^{53}$ this rock formation in China was dated in 2001 by scientists from China. According to the essay the true age is: "They define a $\mathrm{Rb}-\mathrm{Sr}$ isochron age of $286 \mathrm{Ma} . \mathrm{Pb}$ isotopic compositions for bitumen and crude oil from Karamay, Liaohe, and Tarim all show features of crust-mantle mixing." ${ }^{53}$ The Neodymium/Samarium dating method gives the following dates: "Thus, the Nd isotopic compositions strongly show an influence from depleted mantle ( 286 Ma )." ${ }^{54} \mathrm{~A}$ Neodymium/Samarium Isochron gives more dating information " $143 \mathrm{Nd} / 144 \mathrm{Nd}$ and $147 \mathrm{Sm} / 144 \mathrm{Nd}$ ratios vary within 0.51157 to 0.51197 and 0.0778 to 0.153 , respectively, and yield old, depleted mantle Nd model ages of 1.5 to $3.2 \mathrm{Ga} .{ }^{" 55}$ Several tables ${ }^{56}$ in the essay [tables one to six] have isotopic ratios which can be calculated. As we can see below the Lead 207/206 dating method gives wildly discordant dates. How can both methods be so at variance with each other?
28. Lead 207/206 Age Dating Summary

| Table 1 | 207Pb/206Pb | 87Rb/86Sr |
| :---: | :---: | :---: |
| Dating Summary | Age | Age |
| Average | 5,009 | $\mathbf{3 , 7 5 8}$ |
| Maximum | 5,029 | $\mathbf{2 4 , 6 6 1}$ |
| Minimum | $\mathbf{4 , 9 8 2}$ | $\mathbf{1 8 2}$ |
| Difference | $\mathbf{4 7}$ | $\mathbf{2 4 , 4 7 9}$ |

29. Lead 207/206 Age Dating Summary

| Table 2 | 207Pb/206Pb | 87Rb/86Sr |
| :---: | :---: | :---: |
| Dating Summary | Age | Age |
| Average | 4,995 | $\mathbf{6 4 6}$ |
| Maximum | $\mathbf{5 , 0 9 7}$ | $\mathbf{7 0 2}$ |
| Minimum | 4,845 | 565 |
| Difference | $\mathbf{2 5 2}$ | $\mathbf{1 3 8}$ |

30. Lead 207/206 Age Dating Summary

| 207Pb/206Pb | Table 3 | Table 4 | Table 5 | Table 6 |
| :---: | :---: | :---: | :---: | :---: |
| Dating Summary | Age | Age | Age | Age |
| Average | $\mathbf{4 , 1 5 1}$ | 5,060 | 5,027 | 5,079 |
| Maximum | $\mathbf{5 , 0 1 8}$ | $\mathbf{5 , 0 6 3}$ | $\mathbf{5 , 0 6 6}$ | $\mathbf{6 , 4 7 1}$ |
| Minimum | $\mathbf{1 , 7 7 6}$ | 5,053 | $\mathbf{4 , 9 8 7}$ | $\mathbf{4 , 9 7 8}$ |
| Difference | $\mathbf{3 , 2 4 2}$ | $\mathbf{9}$ | $\mathbf{7 9}$ | $\mathbf{1 , 4 9 3}$ |

## Sources of Labrador Sea Sediments

According to the article ${ }^{57}$ this rock formation in Labrador was dated in 2002 by scientists from Canada. According to the essay the true age is 8,600 years old: "The newly acquired Pb isotopic data allow us to better constrain the different source areas that supplied clay-size material during the last deglaciation, until 8.6 kyr (calendar ages)." ${ }^{57} \mathrm{~A}$ table ${ }^{58}$ in the essay has Carbon-14 dates alongside isotopic ratios which can be calculated. As we can see below the Lead 207/206 dating method gives wildly discordant dates. How can both methods be so at variance with each other?
30. Lead 207/206 Versus Carbon-14 Age Dating Summary

| Dating | Carbon 14 Age | Calibrated Age | 207Pb/206Pb | Carbon 14 Age | Calibrated Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | Years | Years | Million Years | Dating Ratio | Dating Ratio |
| Average | 11,656 | $\mathbf{1 3 , 1 1 4}$ | 4,967 | 456,448 | 408,945 |
| Maximum | 22,190 | $\mathbf{2 6 , 0 6 4}$ | $\mathbf{4 , 9 8 2}$ | $\mathbf{6 3 6 , 9 6 1}$ | $\mathbf{5 8 4 , 9 3 8}$ |
| Minimum | 7,792 | $\mathbf{8 , 4 8 5}$ | $\mathbf{4 , 9 4 4}$ | $\mathbf{2 2 3 , 7 2 2}$ | $\mathbf{1 9 0 , 4 6 9}$ |
| Difference | $\mathbf{1 4 , 3 9 8}$ | $\mathbf{1 7 , 5 7 9}$ | $\mathbf{3 8}$ | 413,239 | $\mathbf{3 9 4 , 4 6 9}$ |

## The Petrogenesis of Martian Meteorites

According to the article ${ }^{59}$ these two meteorite samples was dated in 2002 by scientists from the University of New Mexico, the Johnson Space Center, Texas and the Lockheed Engineering and Science Company, Texas. According to the essay the true age based on Neodymium/Samarium dating is 173 and 166 million years old. ${ }^{59} \mathrm{~A}$ table ${ }^{60}$ in the essay has Rubidium/Strontium isotopic ratios which can be calculated. As we can see below Rubidium/Strontium dating method gives wildly discordant dates. The Table 1 summary is the rock that is supposed to be 173 million year old. The Table 2 summary is the rock that is supposed to be 166 million year old. How can both methods be so at variance with each other?
31. Rubidium/Strontium Age Dating Summary

| Dating | 87Rb/86Sr | 87Rb/86Sr |
| :---: | :---: | :---: |
| Summary | Table 1 | Table 2 |
| Average | 579 | 240 |
| Maximum | $\mathbf{3 , 2 3 3}$ | 697 |
| Minimum | $\mathbf{1 7 0}$ | 74 |
| Difference | $\mathbf{3 , 0 6 3}$ | $\mathbf{6 2 4}$ |

## Conclusion

Brent Dalrymple states in his anti creationist book The Age of the Earth: "Several events in the formation of the Solar System can be dated with considerable precision." ${ }^{61}$

Looking at some of the dating it is obvious that precision is much lacking. He then goes on: "Biblical chronologies are historically important, but their credibility began to erode in the eighteenth and nineteenth centuries when it became apparent to some that it would be more profitable to seek a realistic age for the Earth through observation of nature than through a literal interpretation of parables." ${ }^{62}$

I his book he gives a table ${ }^{63}$ with radiometric dates of twenty meteorites. If you run the figures through Microsoft Excel, you will find that they are $98.7 \%$ in agreement. There is only a seven percent difference between the ratio of the smallest and oldest dates. As we have seen in this essay, such a perfect fit is attained by selecting data and ignoring other data. A careful study of the latest research shows that such perfection is illusionary at best. The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary.

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## www.creation.com

## Rocks Older Than The Galaxy

By Paul Nethercott
May 2012
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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." ${ }^{4}$ "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

Evolutionists give the age of the galaxy as " 11 to 13 billion years for the age of the Milky Way Galaxy." ${ }^{1,7}$ Let us remember this as we look at the following dating as given in secular science journals.

## Age Of Uranium Mineralization

These rocks were dated ${ }^{\mathbf{8}}$ in from the Gas Hills in Wyoming were dated in 1979 using the Uranium-Lead method. The rock sample GH-B1 was dated giving ages ${ }^{9}$ between $-1,240$ and 12,000 million years old!

Table 1

| Table 3 | Table 4 | Table 5 |
| :---: | :---: | :---: |
| Million Years | Million Years | Million Years |
| 11,780 | 7,232 | 5,060 |
| -190 | 4,654 | 4,830 |
| -200 | 4,355 | -34 |
| -220 | 3,540 | -160 |
| -310 | -290 | -240 |
| -340 | -340 | -260 |
| -420 | -550 | -500 |
| -530 |  | -610 |
| -530 |  | -650 |
| $-1,240$ |  |  |

"These systematics are similar to those observed by Ludwig for the Shirley Basin uranium ores, for which preferential loss of radioactive daughters in the U decay chain was shown to be the dominant cause of apparentage discordance." ${ }^{10}$
"The trends of apparent age and discordance of the total ore, uraninite-coffinite, and pyrite analyses for the Gas Hills and Crooks Gap ores are very similar to those reported for the Shirley Basin uranium ores." 11

Another group of rock samples were dated ${ }^{\mathbf{1 2}}$ giving absurd values. Many had negative ages! Some were older than the Solar System. How can Earth rocks be older than the Solar System?

## Rocks Older Than The Galaxy

Table 2

| Million Years | Million Years |
| :---: | :---: |
| 7,323 | -340 |
| 4,830 | -500 |
| 5,060 | -550 |
| -240 | -610 |
| -290 | -650 |

Table 3

| Sample | Maximum Age | Minimum Age | Difference | Difference |
| :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Percentage |
| CG-A4 | $\mathbf{7 , 3 2 3}$ | $\mathbf{- 3 4 0}$ | $\mathbf{7 , 6 6 3}$ | $\mathbf{- 2 , 2 5 3 \%}$ |
| CG-A5 | $\mathbf{4 , 6 5 4}$ | $\mathbf{- 5 5 0}$ | $\mathbf{5 , 2 0 4}$ | $\mathbf{- 9 4 6 \%}$ |
| CG-A1 | $\mathbf{4 , 3 5 5}$ | $\mathbf{- 2 9 0}$ | $\mathbf{4 , 6 4 5}$ | $\mathbf{- 1 , 6 0 1 \%}$ |

A rock sample number GH-A6 was dated ${ }^{13}$ as being between 5,870 million and negative 650 million years old. Looking at positive dates above zero and ignoring negative ages what do we find? The oldest is 5,870 million years old and the youngest ${ }^{13}$ is 8 million years old. One is 733 times older than the other. Using a table ${ }^{14}$ in the essay which has the ${ }^{206} \mathrm{~Pb} /{ }^{204} \mathrm{~Pb}$ and ${ }^{207} \mathrm{~Pb} /{ }^{204} \mathrm{~Pb}$ we can easily work out the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios in the sample.

Table 4

| Sample | 207Pb/206Pb | 207Pb/206Pb |
| :---: | :---: | :---: |
| Number | Ratio | Million Years |
| GH-B3 | 0.462 | 4,123 |
| GH-B3 | 0.480 | 4,181 |
| GH-B6 | 0.316 | 3,549 |
| GH-D2407 | 0.332 | 3,628 |
| GH-D2407 | 0.413 | 3,958 |
| GH-D2407 | 0.407 | 3,936 |
| CG-A6 | 0.351 | 3,712 |
| CG-A6 | 0.363 | 3,763 |

If we run the ${ }^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ ratios through Isoplot ${ }^{15}$ sample is over 3,500 million years old. The dates are not put beside the ratios in the original essay. The author states in the opening paragraph of his essay that the rock formation is only "inclusion of all samples increases the observed range to 12 to 41 million years." ${ }^{16}$ In the first paragraph he admits that the isotopic composition has been contaminated over time producing anomalous dates. His choice of this narrow range is purely guesswork. Looking at all the dates it is just random whichever you pick.

## African Peridotite Xenoliths

These kimberlites of southern Africa were dated in 1989 using Rhenium-Osmium dating method. ${ }^{17}$ Some of the ages ${ }^{18}$ are older than the Solar System and galaxy.

Table 5

| 5.6 | Billion Years Old |
| :---: | :---: |
| 12.6 | Billion Years Old |

If we insert the Osmium ratios listed in article ${ }^{19}$ into Microsoft Excel use the dating formula listed in Gunter Faure's book ${ }^{20}$ we get the dates listed in table 6.
$t=\frac{1.04-\left({ }^{187} O s \div{ }^{186} O s\right)}{0.050768} \times 10^{9}$

Table 6

| Average |  |
| :---: | :---: |
| Maximum | $\mathbf{2 8 9 6 5 9}$ |
| Minimum | $\mathbf{- 3 , 3 0 9}$ |

Osmium/Osmium dating
"TMA varies from 0.11 to 5.7 Ga with three samples having Re/Os that is too high to explain their measured 187Os/186Os." ${ }^{21}$

## The Siberian Craton

Xenoliths from kimberlites intruding ${ }^{22}$ the Siberian craton were dated in 1995 using the Re-Os, $\mathrm{Sm}-\mathrm{Nd}$, and RbSr dating methods. The results in Table 5 were acquired using Rubidium-Strontium ${ }^{23}$ isotope dating as being between 5 and 13 billion years old. The dates in Table 6 were obtained using Rhenium-Osmium ${ }^{24}$ dating method.
"If $\mathrm{Re} / \mathrm{Os}$ model ages are calculated using the conventional model age approach, i.e., using the measured $\mathrm{Re} / \mathrm{OS}$ and osmium isotope composition in comparison to some model for bulk-Earth osmium isotope evolution, several peridotites yield negative ages, or ages that are considerably older than the Earth" ${ }^{25}$

Table 7

| 5.45 | Billion Years Old |
| :---: | :---: |
| 6.24 | Billion Years Old |
| 12.71 | Billion Years Old |

Table 8

| 5.5 | Billion Years Old |
| :---: | :---: |
| 11.0 | Billion Years Old |
| 6.9 | Billion Years Old |
| 6.6 | Billion Years Old |

Table 9

| Average | $-144,339$ |
| :---: | :---: |
| Maximum | 2,777 |
| Minimum | $-\mathbf{1 , 5 8 4 , 8 5 7}$ |

Osmium/Osmium Ratio Dating

## History Of The Acapulco Meteorite

This well known meteorite was dated in 1997 by scientists ${ }^{26}$ from France and Germany. According to the dates in Table 7 given ${ }^{27}$ below, the meteorite is older than the galaxy. Even if we take into account the given uncertainty levels listed is the essay, ${ }^{26}$ the rocks could still be 8.6 billion years old.

## Rocks Older Than The Galaxy

| Table 10 |  |  |
| :---: | :---: | :---: |
| Maximum Age | $\mathbf{1 1 , 4 2 1}$ | Million Years |
| Minimum Age | $\mathbf{3 , 4 8 1}$ | Million Years |
| Average Age | $\mathbf{4 , 9 6 4}$ | Million Years |
| Age Difference | $\mathbf{7 , 9 4 0}$ | Million Years |
| Difference | $\mathbf{3 2 8 \%}$ | Percent |
| Standard Deviation | $\mathbf{1 , 7 2 3}$ | Million Years |

## Potassium/Argon Dating of Iron Meteorites

The Weekeroo Station iron meteorite was dated ${ }^{28}$ in 1967 using the Potassium-Argon dating method. The author of the article begins with the following remarks:
"The formation or solidification ages of iron meteorites have never been well determined. The most direct method seems to be that of Stoenner and Zahringer, who measured the potassium and argon contents by neutron-activation analysis. Their data, however, indicated ages of from about 7 to 10 billion years, whereas the age of the solar system is generally well accepted at about 4.7 billion years. Fisher later confirmed these data, but concluded that they were evidence of an unexplained potassium: argon anomaly rather than that they indicated true ages. From Muller and Zahringer's more recent data they conclude that a Potassium/Argon age of about 6.3 billion years can be assigned to many iron meteorites." ${ }^{29}$

The author of the article then concludes with the following remarks:
"The ages found by us are typical of the great ages found for most iron meteorites. From these, in conjunction with the Strontium/Rubidium data of Wasserburg on silicate inclusions in this meteorite, we conclude that the Potassium: Argon dating technique as applied to iron meteorites gives unreliable results. One may derive ad hoc possible explanations of the discord between the silicate and iron-phase ages, such as shock emplacement of these inclusions within the metal matrix without disturbing the potassium: argon ratios in the metal, but we feel that such mechanisms are unlikely." ${ }^{30}$

The essay lists a number of dates in the opening paragraph. The last four in table below are taken from Table 1 in the original essay.

Table 11

| Meteorite Sample | Billion Years |
| :---: | :---: |
| Stoenner and Zahringer | 10.0 |
| Stoenner and Zahringer | 7.0 |
| Muller and Zahringer's | 6.3 |
| Wasserburg, Burnett | 4.7 |
| K-1 | 8.5 |
| K-2 | 9.3 |
| B-1 | $\mathbf{6 . 5}$ |
| G-1 | 10.4 |

Stabilisation of Archaean Lithosphere
The Rhenium-Osmium isotope method was used ${ }^{31}$ to date these rocks in 1995. The data ${ }^{32}$ in the table below give absurd ages:

## Rocks Older Than The Galaxy

Table 12

| Sample Name | Billion Years |
| :---: | :---: |
| PHN-2600 | 8.5 |
| F-865 | 10.2 |
| PHN-2825 | 15.6 |
| PHN-5239 | 11.1 |

The author tries to explain such dating errors: "For example, several of the peridotite Re/Os model ages calculated using measured $187 \mathrm{Re} / 188 \mathrm{Os}$ (TM, in Table 2) either give geologically unreasonable ages or do not intersect the Bulk Earth evolution line at all. Walker reasoned that the highly refractory compositions of Kaapvaal peridotites could have led to complete removal of Re during formation."

## Pb Isotopic age of the Allende Chondrules

Professor Yuri Amelin from The Australian National University did the research in 2007. ${ }^{34}$ More than ten dates are older than the age of the Solar System. One is as old as the Galaxy. ${ }^{35}$

Table 13

| Million Years | Million Years |
| :---: | :---: |
| 10,066 | 5,396 |
| 6,945 | 5,345 |
| 5,956 | 5,336 |
| 5,604 | 5,180 |
| 5,526 | 5,147 |
| 5,462 | 4,950 |

If we run some of the isotopic ratios listed in the online supplement ${ }^{36}$ through Isoplot we get the following dates:

Table 14

| $238 \mathrm{U} / 206 \mathrm{~Pb}$ | $207 \mathrm{~Pb} / 235 \mathrm{U}$ | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ |
| :---: | :---: | :---: |
| 10,066 | 5,731 | 5,947 |
| 6,945 | 5,202 | 5,920 |
| 5,956 | 4,956 | 5,860 |
| 5,604 | 4,864 | 5,735 |
| 5,526 | 4,832 | 5,636 |
| 5,462 | 4,826 | 5,335 |
| 5,396 | 4,807 | 5,265 |

## Rhenium-187/Osmium-187 In Iron Meteorites

The ${ }^{187}$ Rhenium $/{ }^{187}$ Osmium method and Potassium-Argon method were used to date these meteorite ${ }^{37}$ fragments in 1997. Four of the dates were older than the Solar System and two were older than the Galaxy. ${ }^{38}$

## Rocks Older Than The Galaxy

Table 15

| Canyon Diablo Meteorite | Billion Years |
| :--- | :---: |
| Leach Acetone | 5.73 |
| Leach H,O | $\mathbf{8 . 3 1}$ |
| Troilite dissolved | 10.43 |
| Metal 1 | 13.7 |

## Ar-39/Ar-40 Dating of Mesosiderites

Donald Bogard from the Johnson Space Center in Houston, Texas performed this dating ${ }^{36}$ in 1990 using the Argon dating method. The table below is a summary from the appendix ${ }^{37}$ in the original essay. Three dates are as old or older than the Galaxy. Eleven are older than the Solar System.

Table 16

| Meteorite | Maximum Age | Minimum Age | Age Difference |
| :---: | :---: | :---: | :---: |
| Name | Billion Years | Billion Years | Billion Years |
| 1. Bondoc | 4.02 | 3.20 | 0.82 |
| 2. Emery | 9.08 | 3.31 | 5.77 |
| 3. Estherville | 13.96 | 3.18 | 10.78 |
| 4. Hainholz | 5.48 | 1.55 | 3.93 |
| 5. Lowicz | 9.93 | 2.92 | 7.01 |
| 6. Morristown | 7.92 | 3.60 | 4.32 |
| 7. Mount Padbury | 5.52 | 3.49 | 2.03 |
| 8. Patwar Basalt | 6.14 | 1.80 | 4.34 |
| 9. Patwar Gabbro | 8.43 | 2.67 | 5.76 |
| 10. QUE-86900 | 10.92 | 3.24 | 7.68 |
| 11. Simondium | 9.17 | 3.27 | 5.90 |
| 12. Veramin | 13.13 | 2.71 | 10.42 |

## 40Ar-39Ar Chronology

Ekaterina V. Korochantseva from Heidelberg, Germany did this dating in 2009. ${ }^{41}$ Below is a mathematical summary of the appendix ${ }^{42}$ given in the original magazine article.

## Rocks Older Than The Galaxy

Table 17

| Sample Name | Maximum Age | Minimum Age | Average Age | Age Difference |
| :---: | :---: | :---: | :---: | :---: |
| Table A01. Dhofar 019 whole rock | 11,679 | 737 | 2,883 | 10,942 |
| Table A02. Dhofar 019 maskelynite | 10,521 | 818 | 2,674 | 9,703 |
| Table A03. Dhofar 019 pyroxene | 10,730 | 804 | 3,694 | 9,926 |
| Table A04. Dhofar 019 olivine | 10,487 | 1,778 | 4,549 | 8,709 |
| Table A05. Dhofar 019 opaque | 14,917 | 4,420 | 8,453 | 10,497 |
| Table A06. SaU 005 whole rock | 7,184 | 568 | 1,653 | 6,616 |
| Table A07. SaU 005 glass | 6,235 | 3,247 | 4,242 | 2,988 |
| Table A08. SaU 005 maskelynite | 7,432 | 1,344 | 3,899 | 6,088 |
| Table A10. SaU 005 olivine | 13,979 | 3,839 | 6,559 | 10,140 |
| Table A11. Shergotty whole rock | 8,542 | 1,112 | 2,995 | 7,430 |
| Table A15. Zagami whole rock | 6,064 | 94 | 2,276 | 5,970 |
| Table A16. Zagami maskelynite | 5,733 | 238 | 1,202 | 5,495 |
| Table A18. Zagami opaque | 7,707 | 290 | 1,525 | 7,417 |
| Table A9. SaU 005 pyroxene | 12,845 | 1,354 | 4,763 | 11,491 |

(Ages in million so years)
In Table 14 we can see below that 44 dates are older than the age of the Solar System and nine are over ten billion years.

Table 18

| Sample Name | Million Years | Sample Name | Million Years |
| :--- | :---: | :--- | :---: |
| Table A05. Dhofar 019 | $\mathbf{1 4 , 9 1 7}$ | Table A02. Dhofar 019 | $\mathbf{7 , 2 3 3}$ |
| Table A09. SaU 005 | $\mathbf{1 3 , 9 7 9}$ | Table A06. SaU 005 | $\mathbf{7 , 1 8 4}$ |
| Table A18. Zagami | $\mathbf{1 2 , 8 4 5}$ | Table A02. Dhofar 019 | $\mathbf{7 , 1 6 8}$ |
| Table A01. Dhofar 019 | $\mathbf{1 1 , 6 7 9}$ | Table A03. Dhofar 019 | $\mathbf{6 , 8 5 7}$ |
| Table A03. Dhofar 019 | $\mathbf{1 0 , 7 3 0}$ | Table A09. SaU 005 | $\mathbf{6 , 6 8 0}$ |
| Table A02. Dhofar 019 | $\mathbf{1 0 , 5 2 1}$ | Table A05. Dhofar 019 | $\mathbf{6 , 4 8 2}$ |
| Table A04. Dhofar 019 | $\mathbf{1 0 , 4 8 7}$ | Table A04. Dhofar 019 | $\mathbf{6 , 4 5 1}$ |
| Table A02. Dhofar 019 | $\mathbf{1 0 , 3 2 2}$ | Table A07. SaU 005 | $\mathbf{6 , 2 3 5}$ |
| Table A03. Dhofar 019 | $\mathbf{1 0 , 1 4 2}$ | Table A07. SaU 005 | $\mathbf{6 , 1 9 2}$ |
| Table A05. Dhofar 019 | $\mathbf{9 , 6 6 9}$ | Table A14. Shergotty | $\mathbf{6 , 0 6 4}$ |
| Table A05. Dhofar 019 | $\mathbf{9 , 6 1 3}$ | Table A09. SaU 005 | $\mathbf{5 , 8 7 4}$ |
| Table A01. Dhofar 019 | $\mathbf{9 , 2 6 0}$ | Table A04. Dhofar 019 | $\mathbf{5 , 7 7 1}$ |
| Table A05. Dhofar 019 | $\mathbf{9 , 1 4 8}$ | Table A07. SaU 005 | $\mathbf{5 , 7 4 5}$ |
| Table A04. Dhofar 019 | $\mathbf{9 , 1 1 1}$ | Table A15. Zagami | $\mathbf{5 , 7 3 3}$ |
| Table A10. SaU 005 | $\mathbf{8 , 5 4 2}$ | Table A03. Dhofar 019 | $\mathbf{5 , 6 9 3}$ |
| Table A01. Dhofar 019 | $\mathbf{8 , 5 0 7}$ | Table A08. SaU 005 | $\mathbf{5 , 6 0 8}$ |
| Table A09. SaU 005 | $\mathbf{8 , 3 2 3}$ | Table A07. SaU 005 | $\mathbf{5 , 5 9 8}$ |
| Table A03. Dhofar 019 | $\mathbf{8 , 1 9 7}$ | Table A08. SaU 005 | $\mathbf{5 , 5 7 5}$ |
| Table A05. Dhofar 019 | $\mathbf{7 , 9 8 7}$ | Table A07. SaU 005 | $\mathbf{5 , 4 1 4}$ |
| Table A17. Zagami | $\mathbf{7 , 7 0 7}$ | Table A18. Zagami | $\mathbf{5 , 4 0 3}$ |
| Table A04. Dhofar 019 | $\mathbf{7 , 6 1 0}$ | Table A05. Dhofar 019 | $\mathbf{5 , 3 9 1}$ |
| Table A08. SaU 005 | $\mathbf{7 , 4 3 2}$ | Table A07. SaU 005 | $\mathbf{5 , 3 8 9}$ |
|  |  |  |  |

## Rocks Older Than The Galaxy

The author explains the radically absurd ages as contamination: "The temperature extractions above $1380^{\circ} \mathrm{C}$ display apparent ages exceeding the age of the solar system that is indicative of the presence of excess argon." ${ }^{43}$

## Shocked Meteorites: Argon-40/Argon-39

Joachim Kunz ${ }^{44}$ from the Max Plank Institute in Heidelberg, Germany did this dating in 2009 using the Argon-40/Argon-39 dating method. If we look at the appendix ${ }^{45}$ at the end of his article we find many dates older than the Solar Stem and Galaxy.

Table 19

| Sample Name | Million Years |
| :--- | :---: |
| F. Yanzhuang. Host rock | $\mathbf{5 , 5 9 8}$ |
| G. Yanzhuang. Melt fragment | $\mathbf{1 0 , 2 1 7}$ |
|  | 5,423 |
|  | 5,503 |
| H. Yanzhuang. Melt vein | $\mathbf{7 , 0 1 6}$ |
| J. Bluff. Host rock | $\mathbf{1 3 , 3 4 8}$ |
|  | $\mathbf{1 0 , 9 3 8}$ |
|  | $\mathbf{6 , 2 7 2}$ |
| N. Ness County. Host rock \#1 | $\mathbf{5 , 0 5 2}$ |
| O. Ness County. Host rock \#2 | $\mathbf{6 , 6 6 8}$ |
|  | $\mathbf{5 , 5 7 6}$ |
| Q. Paranaiba. Host rock \#2 | $\mathbf{5 , 5 9 3}$ |
| V. Beeler. Host rock \#1 | $\mathbf{6 , 4 6 6}$ |
| W. Beeler. Host rock \#2 | $\mathbf{6 , 6 0 9}$ |

## Potassium-Argon Age Of Iron Meteorites

This dating ${ }^{46}$ was done in 1958. Even dating done fifty years later is giving dates just as absurd. The opening paragraph of the article states:
"Under the usual assumptions accepted for this method, ages have been calculated and found to be close to 10 billion years, which is about twice the reported age of stone meteorites, and also higher than the supposed age of the universe." ${ }^{47}$ The data in Table 16 below was taken from the data in ${ }^{48}$ the original essay.

Table 20

| Meteorite | Age |
| :---: | :---: |
| K-Ar Dating | Billion Years |
| Mt. Ayliff | 6.9 |
| Arispe | 6.8 |
| H. H. Ninninger | 6.9 |
| Carbo | 8.4 |
| Canon Diablo I | 8.5 |
| Canon Diablo I | 6.9 |
| Canon Diablo I | 6.6 |
| Canon Diablo I | 5.3 |
| Canon Diablo II | 13 |
| Canon Diablo II | 11 |
| Canon Diablo II | 10.5 |
| Canon Diablo II | 12 |
| Toluca I | 5.9 |
| Toluca I | 7.1 |
| Toluca II | 10 |
| Toluca II | 10.8 |
| Toluca II | 8.8 |

## The Allende and Orgueil Chondrites

This dating was done in 1976 by scientists ${ }^{49}$ from the United States Geological Survey, Denver, Colorado. The data in Table 17 below was taken from $\mathrm{Pb}-206 / \mathrm{U}-238$ and $\mathrm{Pb}-208 / \mathrm{Th}-232$ dating ${ }^{50}$ summary in the original essay. Thirty one of the dates below are older than the age of the Solar System. Four are over ten billion years. One date is older than the Big Bang explosion date.

Table 21

| Pb-206/U-238 |  |
| :---: | :---: |
| Billion Years | Billion Years |
| 9.86 | 16.49 |
| 8.95 | 14.4 |
| 8.82 | 11.7 |
| 7.82 | 10.40 |
| 7.80 | 10.40 |
| 7.75 | 10.1 |
| 6.66 | 9.86 |
| 6.50 | 9.55 |
| 6.50 | 9.15 |
| 6.44 | 7.52 |
| 6.42 | 6.99 |
| 6.35 | 6.40 |
| 6.33 | 5.44 |
| 6.05 | 5.35 |
| 5.73 | 5.15 |
| 5.73 | 4.81 |

## Ultra-high Excess Argon in Kyanites

These rocks from Japan were dated in 2005 using ${ }^{51}$ the Argon 40 isotope method. The opening paragraph of this article states:
"A laser fusion Ar-Ar technique applied on single crystals of kyanite from river sands of the Kitakami Mountain region of northeast Japan yielded ages of up to 16 Ga , more than three times the age of the earth. Although the age values are geologically meaningless, the ultra-high excess argon in kyanites is unique and hitherto unreported. We interpret this to be an artifact of ultra-high argon pressure derived from radiogenic argon in potassium-rich phases such as phengites during the Barrovian type retrogression of the ultra-high pressure rocks in this region." 52
"In this study, we report the results from fusion Ar-Ar technique on single crystals of kyanite recovered from river sands in the Kitakami region. However, the kyanites yielded ages that are two to three times older than the age of the earth." ${ }^{52}$

Table 22

| Sample | Billion Years |
| :---: | :---: |
| Ky6 | 7.7 |
| Ky7 | 11.1 |
| Ky8 | 15.1 |
| Ky9 | 9.9 |
| Ky11 | 16.3 |
| Ky13 | 11.1 |

## Conclusion

Prominent evolutionist Brent Dalrymple states: "Several events in the formation of the Solar System can be dated with considerable precision." ${ }^{53}$

Looking at some of the dating it is obvious that precision is much lacking. He then goes on: "Biblical chronologies are historically important, but their credibility began to erode in the eighteenth and nineteenth centuries when it became apparent to some that it would be more profitable to seek a realistic age for the Earth through observation of nature than through a literal interpretation of parables." ${ }^{54}$

The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary.

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# Rocks Older Than The Solar System 

Rocks Older Than The Solar System<br>Examining The Thorium Lead Dating Method

By Paul Nethercott<br>August 2013

## Introduction

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." ${ }^{4}$ "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

Evolutionists give the age of the galaxy as " 11 to 13 billion years for the age of the Milky Way Galaxy." ${ }^{1,7}$ Let us remember this as we look at the following dating as given in secular science journals.

## 1. Uranium-Thorium-Lead Isotope Data

These rocks from the Marble Bar area of the Pilbara Craton, Western Australia, were dated ${ }^{8}$ in 2011 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 3.4 billion years old. ${ }^{8}$ If we put the ratios from a table ${ }^{9}$ in the article into Microsoft Excel and run the values through Isoplot ${ }^{10}$ we get ages between 5 and 100 billion years old! How can a rock be 85 billion years older than the Big Bang explosion? Of all the samples, 45 are older than the Earth, 23 are older than the Galaxy and 17 are older than the Universe. There is a 75 billion year spread of dates between the youngest and the oldest ages.

Table 1

| Statistics | $\mathbf{2 0 7 ~ P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ | $\mathbf{2 0 7 P b} / 235 \mathrm{U}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{5 , 3 2 5}$ | $\mathbf{5 6 , 9 7 6}$ | $\mathbf{7 , 3 1 9}$ | $\mathbf{1 5 , 1 9 2}$ |
| Maximum | $\mathbf{5 , 4 0 3}$ | $\mathbf{1 0 0 , 6 0 1}$ | $\mathbf{1 0 , 0 5 4}$ | $\mathbf{3 1 , 0 0 5}$ |
| Minimum | $\mathbf{5 , 2 2 2}$ | $\mathbf{2 4 , 9 8 0}$ | $\mathbf{5 , 7 9 5}$ | $\mathbf{7 , 1 3 8}$ |
| Difference | $\mathbf{1 8 1}$ | $\mathbf{7 5 , 6 2 2}$ | $\mathbf{4 , 2 5 9}$ | $\mathbf{2 3 , 8 6 8}$ |

Table 2

| $208 P b / 232 \mathrm{Th}$ | $\mathbf{2 0 7 P b / 2 3 5 U}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ |
| :---: | :---: | :---: |
| $\mathbf{1 0 0 , 6 0 1}$ | $\mathbf{1 0 , 0 5 4}$ | $\mathbf{3 1 , 0 0 5}$ |
| $\mathbf{8 4 , 4 5 7}$ | $\mathbf{8 , 2 3 0}$ | $\mathbf{2 0 , 3 4 3}$ |
| $\mathbf{7 3 , 9 6 8}$ | $\mathbf{8 , 1 4 3}$ | $\mathbf{1 9 , 5 8 4}$ |
| $\mathbf{6 7 , 4 2 3}$ | $\mathbf{7 , 7 6 3}$ | $\mathbf{1 7 , 3 0 6}$ |
| 58,353 | $\mathbf{7 , 6 5 8}$ | $\mathbf{1 7 , 0 8 8}$ |
| $\mathbf{5 7 , 1 1 6}$ | $\mathbf{7 , 0 2 7}$ | $\mathbf{1 3 , 4 1 0}$ |
| $\mathbf{5 5 , 3 1 1}$ | $\mathbf{6 , 9 7 7}$ | $\mathbf{1 3 , 0 2 2}$ |
| $\mathbf{5 1 , 6 0 7}$ | $\mathbf{6 , 6 8 2}$ | $\mathbf{1 1 , 4 7 9}$ |
| $\mathbf{4 4 , 4 3 9}$ | $\mathbf{6 , 6 6 1}$ | $\mathbf{1 1 , 3 5 3}$ |
| $\mathbf{3 9 , 0 9 0}$ | $\mathbf{6 , 5 2 1}$ | $\mathbf{1 0 , 6 5 2}$ |
| $\mathbf{2 6 , 3 6 1}$ | $\mathbf{6 , 3 1 3}$ | $\mathbf{9 , 9 2 6}$ |
| $\mathbf{2 4 , 9 8 0}$ | $\mathbf{5 , 7 9 5}$ | $\mathbf{7 , 1 3 8}$ |

## 2. Uranium, Thorium and Lead Geochronology

These rocks from the Kola Peninsula in Russia were dated ${ }^{11}$ in 2011 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 350 million years old. ${ }^{11}$ If we put the ratios from a table ${ }^{12}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 269

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and 5,140 million years old! There is an 1,100 percent difference between some dates. That percentage difference equals almost 5,000 million years!

Table 3

| Statistics | 207Pb Age/232Th Age | 238U Age/232Th Age | 238U/206Pb Age | 207Pb/206Pb Age |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{8 5 9 \%}$ | $\mathbf{2 5 5 \%}$ | $\mathbf{1 , 0 5 4}$ | $\mathbf{3 , 3 8 1}$ |
| Maximum | $\mathbf{1 2 7 5 \%}$ | $\mathbf{1 1 6 5 \%}$ | $\mathbf{5 , 1 4 0}$ | $\mathbf{4 , 7 4 1}$ |
| Minimum | $\mathbf{3 6 1 \%}$ | $\mathbf{7 4 \%}$ | $\mathbf{2 6 9}$ | $\mathbf{1 , 3 1 8}$ |
| Difference | $\mathbf{9 1 4 \%}$ | $\mathbf{1 0 9 2 \%}$ | $\mathbf{4 , 8 7 1}$ | $\mathbf{3 , 4 2 3}$ |

## 3. The Uranium, Thorium and Lead Compositions

These rocks from the Morocco and France were dated ${ }^{13}$ in 2007 using the Uranium/Lead and Thorium/Lead dating methods. If we put the ratios from a table ${ }^{14}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 2 and 92 billion years old! How can a rock be 75 billion years older than the Big Bang explosion? Of all the samples, 53 are older than the Earth, 13 are older than the Galaxy and 6 are older than the Universe. There is a 90 billion year spread of dates between the youngest and the oldest ages.

Table 4

| Statistics | $\mathbf{2 0 7 P b} / \mathbf{3 0 6 P b}$ | $\mathbf{2 0 8 P b} / \mathbf{2 3 2 T h}$ | $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$ |
| :---: | :---: | :---: | :---: |
| Average | $\mathbf{4 , 9 5 5}$ | $\mathbf{1 5 , 6 0 9}$ | $\mathbf{4 , 8 7 3}$ |
| Maximum | $\mathbf{5 , 0 9 0}$ | $\mathbf{9 2 , 4 9 4}$ | $\mathbf{1 8 , 6 3 9}$ |
| Minimum | $\mathbf{4 , 8 7 1}$ | $\mathbf{1 , 9 3 9}$ | $\mathbf{1 , 4 3 7}$ |
| Difference | $\mathbf{2 1 9}$ | $\mathbf{9 0 , 5 5 6}$ | $\mathbf{1 7 , 2 0 2}$ |

## 4. Rubidium/Strontium and Uranium/Lead Systematics

These rocks from the Kola Peninsula in Russia were dated ${ }^{15}$ in 2011 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is $2075-2100$ million years old. ${ }^{15}$ If we put the ratios from a table ${ }^{16}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 2 and 10 billion years old! Of all the samples, 45 are older than the Earth, 23 are older than the Galaxy and 17 are older than the Universe. There is a 75 billion year spread of dates between the youngest and the oldest ages.

Table 5

| Statistics | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\underline{\mathbf{8 7 S r} / \mathbf{8 6 S r}}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{5 , 0 2 0}$ | $\mathbf{7 , 2 5 3}$ | $\mathbf{8 , 1 7 7}$ | $\mathbf{2 , 1 8 5}$ |
| Maximum | $\mathbf{5 , 1 0 2}$ | $\mathbf{1 0 , 5 3 9}$ | $\mathbf{1 0 , 2 8 3}$ | $\mathbf{3 , 4 3 6}$ |
| Minimum | $\mathbf{4 , 8 3 4}$ | $\mathbf{2 , 8 1 4}$ | $\mathbf{5 , 3 0 3}$ | $\mathbf{1 , 7 3 9}$ |
| Difference | $\mathbf{2 6 7}$ | $\mathbf{7 , 7 2 5}$ | $\mathbf{4 , 9 8 0}$ | $\mathbf{1 , 6 9 7}$ |

## 5. $\mathbf{C u}-\mathbf{P b}-\mathbf{Z n}-A g$ Mineralisation

These rocks from the Democratic Republic of Congo were dated ${ }^{17}$ in 2009 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 520 million years old. ${ }^{18}$ If we put the ratios from a table ${ }^{19}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 0.1 and 200 billion years old! How can a rock be 185 billion years older than the Big Bang explosion? Of all the samples, 96 are older than the Earth, 42 are older than the Galaxy and 35 are older than the Universe. There is a 198 billion year spread of dates between the youngest and the oldest ages.

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Table 6

| Statistics | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ | $\mathbf{2 0 7 P b} / \mathbf{2 0 6 P b}$ | $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$ | $\mathbf{2 0 7 P b} / 235 \mathrm{U}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{5 2 , 3 2 1}$ | $\mathbf{4 , 8 5 6}$ | $\mathbf{1 1 , 8 8 4}$ | $\mathbf{5 , 7 7 5}$ |
| Maximum | $\mathbf{1 9 9 , 3 1 9}$ | $\mathbf{6 , 2 7 5}$ | $\mathbf{4 8 , 4 9 6}$ | $\mathbf{1 2 , 1 5 0}$ |
| Minimum | $\mathbf{8 8 2}$ | $\mathbf{3 , 0 5 6}$ | $\mathbf{1 7 4}$ | $\mathbf{8 4 8}$ |
| Difference | $\mathbf{1 9 8 , 4 3 7}$ | $\mathbf{3 , 2 1 9}$ | $\mathbf{4 8 , 3 2 2}$ | $\mathbf{1 1 , 3 0 2}$ |

## 6. Uranium-Lead Age Of Baddeleyite

This meteorite was dated ${ }^{20}$ in 2011 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 4.1 billion years old. ${ }^{21}$ If we put the ratios from a table ${ }^{22}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 0.1 and 165 billion years old! How can a rock be 150 billion years older than the Big Bang explosion? Of all the samples 11 are older than the Universe. There is a 125 billion year spread of dates between the youngest and the oldest ages.

Table 7

| Statistics | Pb 207/206 | 207Pb/235U | 206Pb/238U | 207Pb/235U | Pb206/U238 | Pb208/232Th |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{4 , 0 4 2}$ | $\mathbf{2 , 2 0 9}$ | $\mathbf{1 , 0 4 7}$ | $\mathbf{8 3 3}$ | $\mathbf{2 2 2}$ | $\mathbf{1 0 1 , 2 3 1}$ |
| Maximum | $\mathbf{5 , 1 1 2}$ | $\mathbf{4 , 5 1 7}$ | $\mathbf{3 , 3 0 6}$ | $\mathbf{2 , 5 1 5}$ | $\mathbf{2 9 7}$ | $\mathbf{1 6 5 , 4 6 9}$ |
| Minimum | $\mathbf{2 , 6 8 9}$ | $\mathbf{6 8 1}$ | $\mathbf{2 3 8}$ | $\mathbf{1 6 1}$ | $\mathbf{1 8 3}$ | $\mathbf{4 0 , 2 9 7}$ |
| Difference | $\mathbf{2 , 4 2 3}$ | $\mathbf{3 , 8 3 6}$ | $\mathbf{3 , 0 6 8}$ | $\mathbf{2 , 3 5 3}$ | $\mathbf{1 1 4}$ | $\mathbf{1 2 5 , 1 7 2}$ |

Table 8

| Pb208/232Th | Pb208/232Th |
| :---: | :---: |
| 165,469 | 102,437 |
| 150,399 | $\mathbf{8 2 , 8 9 8}$ |
| 143,322 | 74,124 |
| 137,057 | 47,131 |
| 127,166 | 43,247 |

## 7. Mesozoic Lithosphere Destruction

These rocks from the North China Craton were dated ${ }^{23}$ in 2001 using the Uranium/Lead and Thorium/Lead dating methods. The article claims ${ }^{24}$ that the true age is 125 million years old. If we put the ratios from a table ${ }^{25}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 5 and 44 billion years old! How can a rock be 30 billion years older than the Big Bang explosion? Of all the samples, 40 are older than the Earth, 15 are older than the Galaxy and 12 are older than the Universe. There is a 40 billion year spread of dates between the youngest and the oldest ages.

Table 9

| Statistics | Pb 207/206 | $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$ | $\mathbf{2 0 7 P b} / \mathbf{2 3 5 U}$ | Pb208/232Th |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{5 , 0 5 6}$ | $\mathbf{7 , 4 3 1}$ | $\mathbf{3 5 , 6 8 3}$ | $\mathbf{1 1 , 3 0 3}$ |
| Maximum | $\mathbf{5 , 0 9 8}$ | $\mathbf{1 4 , 2 8 2}$ | $\mathbf{4 4 , 6 8 3}$ | $\mathbf{2 7 , 2 0 8}$ |
| Minimum | $\mathbf{5 , 0 4 7}$ | $\mathbf{5 , 8 7 1}$ | $\mathbf{3 3 , 5 2 4}$ | $\mathbf{8 , 2 5 8}$ |
| Difference | $\mathbf{5 1}$ | $\mathbf{8 , 4 1 1}$ | $\mathbf{1 1 , 1 5 9}$ | $\mathbf{1 8 , 9 5 0}$ |

If we use isotopic formulas ${ }^{26-29}$ given in standard geology text we can arrive at ages from the $\mathrm{Rb} / \mathrm{Sr}$ and $\mathrm{Nd} / \mathrm{Sm}$ ratios listed in the article. The formula for $\mathrm{Rb} / \mathrm{Sr}$ age is given as:
$t=\frac{2.303}{\lambda} \log \left(\frac{(87 S r / 86 S r)-(87 S r / 86 S r)_{0}}{(87 R b / 86 S r)}+1\right)$

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Where $t$ equals the age in years. $\lambda$ equals the decay constant. $(87 \mathrm{Sr} / 86 \mathrm{Sr})=$ the current isotopic ratio. $(87 \mathrm{Sr} / 86 \mathrm{Sr})_{0}=$ the initial isotopic ratio. $(87 \mathrm{Rb} / 86 \mathrm{Sr})=$ the current isotopic ratio. The same is true for the formula below.

$$
\begin{equation*}
t=\frac{2.303}{\lambda} \log \left(\frac{(143 N d / 144 N d)-(143 N d / 144 N d)_{0}}{(147 S m / 144 N d)}+1\right) \tag{2}
\end{equation*}
$$

If we put the ratios from this table ${ }^{30}$ in the article into Microsoft Excel and use these formulas we get ages between 116 and 125 million years old! The Uranium/Lead ratios give ages between 5 billion and 44 billion years old!

Table 10

| Method/Sample | FC1-1 | FC1-2 | FC5-1 | FC6-1 | FC6-2 | FC7 | FC4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{Pb} 207 / 206$ | 5,047 | 5,047 | 5,051 | 5,051 | 5,049 | 5,051 | 5,098 |
| $206 \mathrm{~Pb} / 238 \mathrm{U}$ | 6,050 | 6,658 | 5,871 | 6,407 | 6,539 | 6,212 | 14,282 |
| $207 \mathrm{~Pb} / 235 \mathrm{U}$ | 33,767 | 34,765 | 33,524 | 34,380 | 34,588 | 34,071 | 44,683 |
| $\mathrm{~Pb} 208 / 232$ Th | 8,402 | 8,396 | 8,725 | 8,774 | 9,358 | 8,258 | 27,208 |
| $\mathrm{Rb} / \mathrm{Sr}$ | 124 | 126 | 124 | 126 | 126 | 124 | 116 |
| $\mathrm{Nd} / \mathrm{Sm}$ | 125 | 126 | 126 | 125 | 125 | 125 | 116 |

## 8. SHRIMP Uranium/Lead Geochronology

These rocks from Western Australia were dated ${ }^{31}$ in 2001 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 3 billion years old. ${ }^{31}$ If we put the ratios from a table ${ }^{32}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 2 million and 24 billion years old! How can a rock be 10 billion years older than the Big Bang explosion? Of all the samples, 18 are older than the Earth, 3 are older than the Galaxy and 2 are older than the Universe. There is a 24 billion year spread of dates between the youngest and the oldest ages.

Table 11

| Statistics | 208Pb/232Th | 207Pb/206Pb | 206Pb/238U | 207Pb/235U |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{5 , 0 7 5}$ | $\mathbf{3 , 0 2 7}$ | $\mathbf{1 , 3 0 3}$ | $\mathbf{1 , 2 9 4}$ |
| Maximum | $\mathbf{2 4 , 3 4 4}$ | $\mathbf{6 , 4 9 5}$ | $\mathbf{2 , 9 4 1}$ | $\mathbf{2 , 9 4 0}$ |
| Minimum | $\mathbf{8}$ | $\mathbf{8 6 9}$ | $\mathbf{5}$ | $\mathbf{2}$ |
| Difference | $\mathbf{2 4 , 3 3 6}$ | $\mathbf{5 , 6 2 7}$ | $\mathbf{2 , 9 3 5}$ | $\mathbf{2 , 9 3 8}$ |

Table 12

| Statistics | $\mathbf{2 0 8 P b} / \mathbf{2 3 2 T h}$ | $\mathbf{2 0 7 P b} / \mathbf{2 0 6 P b}$ | $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$ | $\mathbf{2 0 7 P b} / \mathbf{2 3 5 U}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{1 , 9 8 9}$ | $\mathbf{2 , 6 8 8}$ | $\mathbf{2 , 7 9 3}$ | $\mathbf{2 , 7 2 9}$ |
| Maximum | $\mathbf{2 3 , 3 5 5}$ | $\mathbf{2 , 6 8 8}$ | $\mathbf{2 , 7 9 3}$ | $\mathbf{2 , 7 2 9}$ |
| Minimum | $\mathbf{5 6}$ | $\mathbf{2 , 6 5 1}$ | $\mathbf{2 , 5 5 8}$ | $\mathbf{2 , 6 1 8}$ |
| Difference | $\mathbf{2 3 , 3 0 0}$ | $\mathbf{3 7}$ | $\mathbf{2 3 6}$ | $\mathbf{1 1 1}$ |

Table 13

| Statistics | $\mathbf{2 0 8 P b} / \mathbf{2 3 2 T h}$ | $\mathbf{2 0 7 P b} / \mathbf{2 0 6 P b}$ | $\mathbf{2 0 7 P b} / \mathbf{2 3 5 U}$ |
| :---: | :---: | :---: | :---: |
| Average | $\mathbf{1 , 8 3 4}$ | $\mathbf{2 , 7 1 6}$ | $\mathbf{2 , 0 9 8}$ |
| Maximum | $\mathbf{1 1 , 9 6 4}$ | $\mathbf{3 , 3 4 7}$ | $\mathbf{3 , 3 5 1}$ |
| Minimum | $\mathbf{0 . 1}$ | $\mathbf{2 , 4 9 0}$ | $\mathbf{5 9}$ |
| Difference | $\mathbf{1 1 , 9 6 4}$ | $\mathbf{8 5 7}$ | $\mathbf{3 , 2 9 1}$ |

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## 9. The Beverley Uranium Deposit

These rocks from the North Flinders Ranges, South Australia., were dated ${ }^{33}$ in 2010 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 400 million years old. ${ }^{34}$ If we put the ratios from a table ${ }^{35}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 1 million and 20 billion years old! How can a rock be 5 billion years older than the Big Bang explosion? Of all the samples, 6 are older than the Earth, 3 are older than the Galaxy and 2 are older than the Universe. There is a 20 billion year spread of dates between the youngest and the oldest ages. In table 15 we can see the percentage difference between the Thorium dates and the other three dating ratios used. The difference is almost 600,000 percent!

Table 14

| Statistical | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| Summary | 207/206 | 206Pb/238U | 207Pb/235U | 208Pb/232Th |
| Average | 737 | 3 | 3 | $\mathbf{3 , 7 5 8}$ |
| Maximum | $\mathbf{2 , 4 2 9}$ | 7 | 7 | $\mathbf{2 0 , 5 8 3}$ |
| Minimum | $\mathbf{9}$ | $\mathbf{0 . 1 9 3 4}$ | $\mathbf{1}$ | $\mathbf{5 2}$ |
| Difference | $\mathbf{2 , 4 2 0}$ | 7 | $\mathbf{6}$ | $\mathbf{2 0 , 5 3 1}$ |

Table 15

| Statistical | Ratio | Ratio | Ratio |
| :---: | :---: | :---: | :---: |
| Summary | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / \mathbf{2 3 5 U}$ |
| Average | $\mathbf{2 5 , 8 4 1 \%}$ | $\mathbf{9 5 , 1 0 7 \%}$ | $\mathbf{9 1 , 0 7 3 \%}$ |
| Maximum | $\mathbf{1 3 7 , 2 2 0 \%}$ | $\mathbf{5 8 0 , 6 9 3 \%}$ | $\mathbf{5 7 1 , 7 5 0 \%}$ |
| Minimum | $\mathbf{6 5 4 \%}$ | $\mathbf{1 , 2 6 0 \%}$ | $\mathbf{8 0 0 \%}$ |
| Difference | $\mathbf{1 3 6 , 5 6 5 \%}$ | $\mathbf{5 7 9 , 4 3 3 \%}$ | $\mathbf{5 7 0 , 9 5 0 \%}$ |

## 10. Isotopic Systematics of the Goalpara Ureilite

This meteorite was dated ${ }^{36}$ in 1994 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 4.55 billion years old. ${ }^{36}$ If we put the ratios from a table ${ }^{9}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 5 and 173 billion years old! How can a rock be 160 billion years older than the Big Bang explosion? Of all the samples, 123 are older than the Earth, 77 are older than the Galaxy and 71 are older than the Universe. There is a 168 billion year spread of dates between the youngest and the oldest ages.

Table 16

| Statistics | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ |
| :---: | :---: | :---: | :---: |
| Average | $\mathbf{5 , 0 5 6}$ | $\mathbf{2 7 , 4 0 6}$ | $\mathbf{8 7 , 8 2 5}$ |
| Maximum | $\mathbf{5 , 2 7 9}$ | $\mathbf{5 1 , 6 1 2}$ | $\mathbf{1 7 3 , 6 3 3}$ |
| Minimum | $\mathbf{4 , 9 7 9}$ | $\mathbf{4 , 9 2 9}$ | $\mathbf{1 7 , 6 5 8}$ |
| Difference | $\mathbf{3 0 0}$ | $\mathbf{4 6 , 6 8 3}$ | $\mathbf{1 5 5 , 9 7 6}$ |

## 11. Middle Atlas Peridotite Xenoliths

These rocks from Morooco were dated ${ }^{38}$ in 2009 using the Uranium/Lead and Thorium/Lead dating methods. If we put the ratios from a table ${ }^{39}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 3 and 14 billion years old! How can a rock be as old as the Big Bang explosion? Of all the samples, 3 are older than the Earth, 1 are older than the Galaxy and 1 are older than the Universe. There is a 6 billion year spread of dates between the youngest and the oldest ages.

## Rocks Older Than The Solar System

Table 17

| Statistics | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ |
| :---: | :---: | :---: | :---: |
| Average | $\mathbf{9 , 4 9 3}$ | $\mathbf{4 , 9 3 9}$ | $\mathbf{5 , 0 5 6}$ |
| Maximum | $\mathbf{1 4 , 5 5 7}$ | $\mathbf{4 , 9 9 6}$ | $\mathbf{6 , 4 1 9}$ |
| Minimum | $\mathbf{4 , 4 2 9}$ | $\mathbf{4 , 8 8 2}$ | $\mathbf{3 , 6 9 3}$ |
| Difference | $\mathbf{1 0 , 1 2 7}$ | $\mathbf{1 1 4}$ | $\mathbf{2 , 7 2 7}$ |

## 12. A Precise 232Th/208Pb Chronology

These rocks from Inner Mongolia were dated ${ }^{40}$ in 1993 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 555 million years old. ${ }^{40}$ If we put the ratios from a table ${ }^{41}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 400 million and 55 billion years old! How can a rock be 40 billion years older than the Big Bang explosion? Of all the samples, 170 are older than the Earth, 34 are older than the Galaxy and 19 are older than the Universe. There is a 75 billion year spread of dates between the youngest and the oldest ages.

Table 18

| Statistics | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | 208Pb/232Th | $206 \mathrm{~Pb} / 238 \mathrm{U}$ |
| :---: | :---: | :---: | :---: |
| Average | 5,068 | $\mathbf{7 6 4}$ | $\mathbf{9 , 3 2 1}$ |
| Maximum | 8,077 | 5,699 | 54,790 |
| Minimum | $\mathbf{3 , 5 8 6}$ | 402 | $\mathbf{4}$ |
| Difference | 4,491 | 5,297 | 54,787 |

## 13. Age of the MET 78008 Ureilite

This meteorite was dated ${ }^{42}$ in 1994 using the Uranium/Lead and Thorium/Lead dating methods. The article claims that the true age is 4.56 billion years old. ${ }^{42}$ If we put the ratios from a table ${ }^{43}$ in the article into Microsoft Excel and run the values through Isoplot we get ages between 5 and 90 billion years old! How can a rock be 65 billion years older than the Big Bang explosion? Of all the samples, 63 are older than the Earth, 32 are older than the Galaxy and 29 are older than the Universe. There is a 75 billion year spread of dates between the youngest and the oldest ages.

Table 19

| Statistics | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ |
| :---: | :---: | :---: | :---: |
| Average | 5,077 | 15,565 | 47,442 |
| Maximum | 5,327 | 30,179 | 90,595 |
| Minimum | 4,963 | 7,496 | 14,271 |
| Difference | 364 | 22,683 | 76,324 |

Table 20

| Statistics | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ |
| :---: | :---: | :---: |
| Average | $\mathbf{1 1 , 5 2 0}$ | $\mathbf{4 , 4 9 5}$ |
| Maximum | 25,513 | 4,576 |
| Minimum | 4,283 | $\mathbf{4 , 4 1 1}$ |
| Difference | 21,229 | $\mathbf{1 6 6}$ |

## Rocks Older Than The Solar System

## Conclusion

Yuri Amelin states in the journal Elements that radiometric dating is extremely accurate: "However, four 238U/235U-corrected CAI dates reported recently (Amelin et al. 2010; Connelly et al. 2012) show excellent agreement, with a total range for the ages of only 0.2 million years - from $4567.18 \pm 0.50 \mathrm{Ma}$ to $4567.38 \pm 0.31$ Ма." 44-46

To come within 0.2 million years out of 4567.18 million years means an accuracy of $99.99562 \%$. Looking at some of the dating it is obvious that precision is much lacking. The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in radiometric dating is selectively taken to suit and ignores data to the contrary.

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## www.creation.com

# Rocks Older Than The Earth <br> By Paul Nethercott <br> May 2012 

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

Evolutionists give the age of the galaxy as " 11 to 13 billion years for the age of the Milky Way Galaxy." ${ }^{1,7}$ Let us remember this as we look at the following dating as given in secular science journals.

## Broken Hill, New South Wales

These rocks were dated ${ }^{8}$ in 1981 using the ${ }^{40} \mathrm{Ar} /{ }^{39} \mathrm{Ar}$ dating method. According to the dates obtained, many of the rocks are older than the Earth and Solar System. Some of the rocks are as old as the galaxy itself. The author of the article comments:
"It has been argued already that the high initial ages in the release patterns of both hornblende and plagioclase can be translated into a concentration of excess 40Ar. Concentrations for those samples analysed by the 40Ar / 39 Ar spectrum method are given in Table 5, and can be used to estimate the partition coefficient of Ar between hornblende and plagioclase." ${ }^{9}$
"Excess 40 Ar was incorporated into minerals during the 520-Ma event at a temperature of about $350^{\circ} \mathrm{C}$." ${ }^{10}$
There is no way of proving this assumption. It is just an excuse for such ridiculous ages of geological system that supposedly formed between 1,600 and 500 million years ago. ${ }^{11}$ The data in tables 1 to 6 shows ages ${ }^{\mathbf{1 2}}$ greater than the age of the Solar System.

Table 1

| Temperature | Age | Age |
| :---: | :---: | :---: |
| 40Ar/39Ar | Million Years | Category |
| Plagioclase |  |  |
| $\mathbf{7 0 0}$ | $\mathbf{7 , 4 7 3}$ | Older Than Solar System |
| $\mathbf{6 5 0}$ | $\mathbf{5 , 7 5 3}$ | Older Than Solar System |
| $\mathbf{B 8 0}$ | $\mathbf{6 , 1 8 5}$ | Older Than Solar System |
| $\mathbf{1 2 3 0}$ | $\mathbf{5 , 2 4 4}$ | Older Than Solar System |
| $\mathbf{1 2 5 0}$ | $\mathbf{5 , 1 9 1}$ | Older Than Solar System |
| FUSE | $\mathbf{5 , 7 2 1}$ | Older Than Solar System |
| Hornblende |  |  |
| $\mathbf{4 7 0}$ | $\mathbf{5 , 0 5 0}$ | Older Than Solar System |
| $\mathbf{5 3 0}$ | $\mathbf{4 , 8 0 2}$ | Older Than Earth |

Ages from 4,802 to 7,473 million years old.

## Rocks Older Than The Earth

Table 2

| Temperature | Age | Age |
| :---: | :---: | :---: |
| 40Ar/39Ar | Million Years | Category |
| Plagioclase |  |  |
| TF | $\mathbf{5 , 1 7 0}$ | Older Than Solar System |
| $\mathbf{3 5 0}$ | $\mathbf{6 , 9 3 1}$ | Older Than Solar System |
| $\mathbf{4 3 0}$ | $\mathbf{7 , 0 1 5}$ | Older Than Solar System |
| $\mathbf{4 9 0}$ | $\mathbf{6 , 6 1 1}$ | Older Than Solar System |
| $\mathbf{5 4 0}$ | $\mathbf{6 , 1 6 7}$ | Older Than Solar System |
| $\mathbf{5 9 0}$ | $\mathbf{5 , 0 5 0}$ | Older Than Solar System |
| $\mathbf{1 0 6 0}$ | $\mathbf{4 , 6 3 7}$ | Older Than Earth |
| $\mathbf{1 0 8 0}$ | $\mathbf{4 , 9 2 9}$ | Older Than Earth |
| $\mathbf{1 1 0 0}$ | $\mathbf{5 , 1 7 1}$ | Older Than Solar System |
| $\mathbf{1 2 0 0}$ | $\mathbf{6 , 0 3 7}$ | Older Than Solar System |
| FUSE | $\mathbf{7 , 0 1 0}$ | Older Than Solar System |

Ages from 4,637 to 7,015 million years old.
Table 3

| Temperature | Age | Age |
| :---: | :---: | :---: |
| $40 \mathrm{Ar} / 39 \mathrm{Ar}$ | Million Years | Category |
| Clinopyroxene |  |  |
| $\mathbf{1 0 4 0}$ | $\mathbf{4 , 7 0 4}$ | Older Than Earth |
| $\mathbf{1 0 9 0}$ | $\mathbf{4 , 9 7 0}$ | Older Than Earth |
| $\mathbf{1 0 7 0}$ | $\mathbf{4 , 9 8 9}$ | Older Than Earth |
| $\mathbf{1 1 2 0}$ | $\mathbf{4 , 7 6 7}$ | Older Than Earth |
| FUSE | $\mathbf{5 , 3 7 3}$ | Older Than Solar System |

Ages from 4,704 to 5,373 million years old.

Table 4

| Temperature | Age | Age |
| :---: | :---: | :---: |
| 40Ar/39Ar | Million Years | Category |
| Plagioclase |  |  |
| TF | $\mathbf{6 , 7 3 0}$ | Older Than Solar System |
| $\mathbf{3 5 0}$ | $\mathbf{7 , 3 1 7}$ | Older Than Solar System |
| $\mathbf{4 4 0}$ | $\mathbf{5 , 0 5 5}$ | Older Than Solar System |
| $\mathbf{5 2 0}$ | $\mathbf{4 , 8 6 1}$ | Older Than Earth |
| $\mathbf{5 8 0}$ | $\mathbf{5 , 0 7 5}$ | Older Than Solar System |
| $\mathbf{6 5 0}$ | $\mathbf{4 , 9 7 3}$ | Older Than Earth |
| $\mathbf{9 3 0}$ | $\mathbf{5 , 4 0 9}$ | Older Than Solar System |
| $\mathbf{9 7 0}$ | $\mathbf{6 , 7 9 5}$ | Older Than Solar System |
| $\mathbf{1 0 0 0}$ | $\mathbf{7 , 5 8 7}$ | Older Than Solar System |
| $\mathbf{1 0 3 0}$ | $\mathbf{6 , 9 6 0}$ | Older Than Solar System |
| $\mathbf{1 0 6 0}$ | $\mathbf{6 , 7 9 9}$ | Older Than Solar System |
| $\mathbf{1 0 7 0}$ | $\mathbf{6 , 5 1 1}$ | Older Than Solar System |
| $\mathbf{1 0 9 0}$ | $\mathbf{7 , 2 5 7}$ | Older Than Solar System |
| $\mathbf{1 1 4 0}$ | $\mathbf{7 , 8 2 3}$ | Older Than Solar System |
| $\mathbf{1 1 7 0}$ | $\mathbf{7 , 6 6 6}$ | Older Than Solar System |
| $\mathbf{1 3 0 0}$ | $\mathbf{9 , 5 8 8}$ | Older Than Solar System |
| $\mathbf{1 3 8 0}$ | $\mathbf{8 , 4 3 2}$ | Older Than Solar System |
| FUSE | $\mathbf{7 , 2 3 4}$ | Older Than Solar System |

Ages from 4,861 to 9,588 million years old.

## Rocks Older Than The Earth

Table 5

| Temperature | Age | Age |
| :---: | :---: | :---: |
| $\mathbf{4 0 A r} / 39 \mathrm{Ar}$ | Million Years | Category |
| Plagioclase |  |  |
| $\mathbf{7 1 0}$ | $\mathbf{7 , 6 5 3}$ | Older Than Solar System |
| $\mathbf{7 7 0}$ | $\mathbf{6 , 4 8 4}$ | Older Than Solar System |
| $\mathbf{8 0 0}$ | $\mathbf{7 , 3 6 7}$ | Older Than Solar System |
| $\mathbf{8 2 0}$ | $\mathbf{6 , 7 0 9}$ | Older Than Solar System |
| Hornblende |  |  |
| $\mathbf{5 5 0}$ | $\mathbf{5 , 0 6 8}$ | Older Than Solar System |
| $\mathbf{6 2 0}$ | $\mathbf{4 , 7 7 7}$ | Older Than Earth |

Ages from 4,777 to 7,653 million years old.
Table 6

| Temperature | Age | Age |
| :---: | :---: | :---: |
| $40 \mathrm{Ar} / 39 \mathrm{Ar}$ | Million Years | Category |
| Plagioclase |  |  |
| $\mathbf{3 6 0}$ | $\mathbf{5 , 7 4 8}$ | Older Than Solar System |
| $\mathbf{5 5 0}$ | $\mathbf{5 , 4 5 9}$ | Older Than Solar System |
| $\mathbf{8 4 0}$ | $\mathbf{5 , 9 9 8}$ | Older Than Solar System |
| Hornblende |  |  |
| $\mathbf{9 6 0}$ | $\mathbf{9 , 6 8 1}$ | Older Than Solar System |
| $\mathbf{9 6 0}$ | $\mathbf{9 , 5 8 2}$ | Older Than Solar System |
| $\mathbf{9 9 0}$ | $\mathbf{9 , 8 5 2}$ | Older Than Solar System |
| Muscovite |  |  |
| $\mathbf{5 6 0}$ | $\mathbf{9 , 5 2 1}$ | Older Than Solar System |

Ages from 5,459 to 9,852 million years old.

The data in table 7 shows ${ }^{13}$ ages older than the Earth and Solar System.
Table 7

| Sample | Mineral | Age |
| :---: | :---: | :---: |
| Number | Type | Million Years |
| $79-173$ | Plagioclase | 5,800 |
| $79-173$ | Hornblende | 5,300 |
| $79-459$ | Hornblende | 5,500 |
| $79-459$ | Plagioclase | $\mathbf{7 , 0 0 0}$ |
| $79-461$ | Hornblende | 5,500 |
| $79-461$ | Plagioclase | $\mathbf{7 , 3 0 0}$ |

Ages from 5,300 to 7,300 million years old.

## Rocks Older Than The Earth

## Ages In The Allende Meteorite

This dating was done in $1983{ }^{\mathbf{1 4}}$ and gave ages between 2,990 and 8,880 million years old. ${ }^{15}$ The author discusses the problem and proposed solutions:
"The existence in the Allende meteorite of coarse-grained Ca-Al-rich inclusions (CAI) with 40Ar/39Ar apparent ages exceeding the age of the solar system was reported by Jessberger and Dominik [1] and Jessberger et al. [2] and confirmed by Herzog et al. [3]." ${ }^{16}$

Table 8

| Sample | Age A | Error A | Age B | Error B |
| :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Million Years |
| EGG 1 |  |  |  |  |
| 700 | 5,070 | 40 |  |  |
| 1000 | 5,190 | 50 |  |  |
| 1200 | 4,730 | 50 |  |  |
| 1650 | 4,570 | 50 |  |  |
| Total | 4,860 | 50 | 4,800 | 100 |
|  |  |  |  |  |
| EGG 2 |  |  |  |  |
| 700 | 7,370 | 420 |  |  |
| 1000 | 4,670 | 320 |  |  |
| 1200 | 3,430 | 460 |  |  |
| 1650 | 4,510 | 240 |  |  |
| Total | 4,470 | 200 | 4,470 | 200 |
|  |  |  |  |  |
| EGG 3 |  |  |  |  |
| 700 | 8,880 | 120 |  |  |
| 1000 | 6,450 | 90 |  |  |
| 1200 | 2,990 | 230 |  |  |
| 1650 | 5,660 | 270 |  |  |
| Total | 5,930 | 120 | 5,020 | 120 |

Ages from 2,990 to 8,880 million years old.

Below [Table 9] we can see some more dating ${ }^{17}$ that was done on the same meteorite by Herzog in 1980. He give three possible reasons ${ }^{18}$ why the dates are in such conflict with the standard evolutionary model:

## 1

"The coarse-grained Ca-Al-rich inclusions are really older than 4.6 G.y., associated with in situ decay of K in pre-solar dust."
$\underline{2}$
"The excess Argon 40 and Argon 36 could be due to atmospheric contamination."

## $\underline{3}$

"The excess 40 and the trapped 36 may have come from the degassing of matrix and/or rim material sometime in the interval 3.6-4.1 G.y. ago."

Table 9

| Mineral | Age | Error |
| :---: | :---: | :---: |
| System | Million Years | Million Years |
| Vein | 8,500 | 700 |
| Spinel | 6,900 | 800 |
| Vein | 5,250 | 140 |
| Spinel | 6,400 | 500 |
| Bulk | 5,120 | 20 |
| Bulk | 5,100 | 100 |
| 01. Skel. | 6,290 | 10 |

Ages from 5,100 to 8,500 million years old.

## U-Th-Pb, Sm-Nd And Rb-Sr Model Ages

Below we can see some more dating ${ }^{19}$ that was done on some Moon rocks by Oberli in 1978. Oberli states ${ }^{20}$ that the $\mathrm{U}-\mathrm{Th}-\mathrm{Pb}$ data is concordant but the Neodymium dates are uncertain. Again it is just an arbitrary choice he makes as to which date is certain and which date is not.

Table 10

| Sample | Pb-206/Pb-207 | Pb-206/U-238 | Pb-208/Th-232 | Nd-143/Nd-144 | Rb-87/Sr-86 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Million Years | Million Years | Million Years | Million Years | Million Years |
| $\mathbf{6 6 0 7 5 , 1 1 D}$ | $\mathbf{5 , 3 7 1}$ | $\mathbf{7 , 7 9 4}$ | $\mathbf{8 , 2 8 0}$ |  |  |
| $\mathbf{6 6 0 7 5 , 1 1}$ | $\mathbf{5 , 3 5 8}$ | $\mathbf{7 , 7 4 0}$ | $\mathbf{8 , 3 7 5}$ | $\mathbf{4 , 5 3 0}$ | $\mathbf{4 , 2 4 0}$ |

Ages from 4,240 to 8,375 million years old.

## Gerontology Of The Allende Meteorite

This article appeared ${ }^{\mathbf{2 1}}$ in Nature magazine in 1979. Jessberger admits that the wildly discordant ages cannot be due to normal processes:
"In the Allende meteorite several elements are found to have an isotopic composition that cannot be due to radioactive or spallation or fractionation processes." ${ }^{22}$
"In the most widely accepted theory a supernova triggered the collapse of the solar nebula, and the anomalously high ages would be due to an enhanced $40 \mathrm{~K} / 39 \mathrm{~K}$ isotopic ratio produced in the explosive carbon burning shell of the supernova? In another, controversial interpretation these ages could have chronological significance, as here the presolar grains are relicts from various old stellar nucleosynthetic and condensation processes unrelated to the formation of the Solar System." 22

He then quotes several ${ }^{23,24,25}$ science journals for an explanation. He thinks the ages could be residue from an ancient supernova or contamination for pre galactic dust not related to the formation of the Solar System. Again, like Oberli his solution is totally unprovable. How would you test such a hypothesis? Some of the dates are older than the galaxy. How do we know that Earth rocks have not been contaminated in such a way? During the formation of the Solar System, the Earth might have absorbed such materials. His choice of "true" ages is just guess and not provable science.

Table 9

| Meteorite | Age | Error | Age | Error |
| :---: | :---: | :---: | :---: | :---: |
| Sample 17 | Million Years | Million Years | Million Years | Million Years |
| $\mathbf{5 0 0}$ | $\mathbf{7 , 6 8 0}$ | $\mathbf{8 0}$ | $\mathbf{4 , 9 6 0}$ | $\mathbf{4 2 0}$ |
| $\mathbf{5 8 0}$ | $\mathbf{5 , 8 3 0}$ | $\mathbf{8 0}$ | $\mathbf{4 , 6 0 0}$ | $\mathbf{1 6 0}$ |
| $\mathbf{6 6 0}$ | $\mathbf{5 , 3 5 0}$ | $\mathbf{4 0}$ | $\mathbf{4 , 9 7 0}$ | $\mathbf{6 0}$ |
| $\mathbf{7 4 0}$ | $\mathbf{5 , 0 9 0}$ | 20 | $\mathbf{4 , 9 7 0}$ | $\mathbf{4 0}$ |
| $\mathbf{8 2 0}$ | $\mathbf{5 , 0 8 0}$ | $\mathbf{4 0}$ | $\mathbf{4 , 9 9 0}$ | $\mathbf{6 0}$ |
| $\mathbf{8 9 0}$ | $\mathbf{5 , 2 1 0}$ | $\mathbf{4 0}$ | $\mathbf{5 , 2 1 0}$ | $\mathbf{4 0}$ |
| $\mathbf{9 5 0}$ | $\mathbf{4 , 9 7 0}$ | $\mathbf{6 0}$ | $\mathbf{4 , 9 7 0}$ | $\mathbf{6 0}$ |
| $\mathbf{1 , 0 1 0}$ | $\mathbf{4 , 9 7 0}$ | $\mathbf{3 0}$ | $\mathbf{4 , 9 7 0}$ | $\mathbf{3 0}$ |
| $\mathbf{1 , 0 7 0}$ | 5,340 | $\mathbf{4 0}$ | $\mathbf{5 , 3 4 0}$ | $\mathbf{4 0}$ |
| $\mathbf{1 , 1 3 0}$ | $\mathbf{5 , 5 4 0}$ | $\mathbf{2 0}$ | $\mathbf{5 , 4 3 0}$ | $\mathbf{4 0}$ |
| $\mathbf{1 , 2 0 0}$ | $\mathbf{6 , 2 1 0}$ | $\mathbf{1 0 0}$ | $\mathbf{5 , 2 5 0}$ | $\mathbf{2 4 0}$ |
| $\mathbf{1 , 2 8 0}$ | $\mathbf{5 , 1 9 0}$ | $\mathbf{1 9 0}$ | $\mathbf{1 , 4 6 0}$ | $\mathbf{1 , 4 8 0}$ |
| $\mathbf{1 , 3 8 0}$ | $\mathbf{7 , 2 0 0}$ | $\mathbf{5 9 0}$ | $\mathbf{2 , 6 7 0}$ | $\mathbf{5 , 6 5 0}$ |
| Total | $\mathbf{5 , 5 0 0}$ | 20 | $\mathbf{5 , 1 2 0}$ | $\mathbf{6 0}$ |

Ages from 1,460 to 7,680 million years old.

Table 10

| Meteorite | Age | Error | Age | Error |
| :---: | :---: | :---: | :---: | :---: |
| Sample 18 | Million Years | Million Years | Million Years | Million Years |
| $\mathbf{4 5 0}$ | $\mathbf{1 1 , 0 1 0}$ | $\mathbf{6 0}$ | $\mathbf{4 , 5 2 0}$ | $\mathbf{2 , 2 4 0}$ |
| $\mathbf{5 8 0}$ | $\mathbf{8 , 0 6 0}$ | $\mathbf{1 4 0}$ | $\mathbf{4 , 4 7 0}$ | $\mathbf{5 0 0}$ |
| $\mathbf{6 7 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{4 0}$ | $\mathbf{4 , 9 7 0}$ | $\mathbf{1 6 0}$ |
| $\mathbf{7 5 0}$ | $\mathbf{6 , 3 1 0}$ | $\mathbf{3 0}$ | $\mathbf{4 , 9 0 0}$ | $\mathbf{9 0}$ |
| $\mathbf{8 3 0}$ | $\mathbf{5 , 3 7 0}$ | $\mathbf{2 0}$ | $\mathbf{5 , 1 3 0}$ | $\mathbf{6 0}$ |
| $\mathbf{9 0 0}$ | $\mathbf{4 , 9 6 0}$ | $\mathbf{4 0}$ | $\mathbf{4 , 9 6 0}$ | $\mathbf{4 0}$ |
| $\mathbf{9 7 0}$ | $\mathbf{4 , 9 0 0}$ | $\mathbf{4 0}$ | $\mathbf{4 , 9 0 0}$ | $\mathbf{4 0}$ |
| $\mathbf{1 , 0 4 0}$ | $\mathbf{4 , 8 9 0}$ | $\mathbf{4 0}$ | $\mathbf{4 , 8 9 0}$ | $\mathbf{4 0}$ |
| $\mathbf{1 , 1 1 0}$ | $\mathbf{4 , 9 0 0}$ | $\mathbf{3 0}$ | $\mathbf{4 , 9 0 0}$ | $\mathbf{3 0}$ |
| $\mathbf{1 , 1 9 0}$ | $\mathbf{4 , 8 2 0}$ | $\mathbf{2 0}$ | $\mathbf{4 , 8 2 0}$ | $\mathbf{2 0}$ |
| $\mathbf{1 , 3 0 0}$ | $\mathbf{5 , 3 7 0}$ | $\mathbf{1 0 0}$ | $\mathbf{5 , 3 7 0}$ | $\mathbf{1 0 0}$ |
| Total | $\mathbf{6 , 0 5 0}$ | $\mathbf{4 0}$ | $\mathbf{5 , 0 8 0}$ | $\mathbf{5 0}$ |

## Pre Cambrian Earth Rocks

This dating ${ }^{26}$ was done in 2005 at the Heidelberg University in Germany. The author comments on the cause for such absurd dates:
"The bulk $40 \mathrm{Ar} / 36 \mathrm{Ar}$ ratio is more radiogenic than atmospheric composition, indicating-in addition to an atmospheric component - the presence of a slight but detectable contribution of an excess 40 Ar component, i.e., 40 Ar trapped from an external source, because it cannot be due to in situ decay of 40 K . This circumstance is indicated by the very high apparent ages (up to 5 Ga ) of the irradiated type I shungite (Appendix Table A1)." ${ }^{27}$

Below we can see some of the dates ${ }^{\mathbf{2 8}}$ given in the article. Several dates are older than the theory of evolution allows:

Table 11

| Sample | Age | Error |
| :---: | :---: | :---: |
| Temperature | Million | Million |
| Centigrade | Years | Years |
| $\mathbf{8 2 0}$ | $\mathbf{4 , 9 6 4}$ | $\mathbf{2 3 9}$ |
| $\mathbf{8 5 0}$ | $\mathbf{4 , 9 1 6}$ | $\mathbf{1 1 4}$ |
| $\mathbf{8 8 0}$ | $\mathbf{5 , 2 6 9}$ | $\mathbf{1 2 0}$ |
| $\mathbf{9 1 0}$ | $\mathbf{5 , 8 0 4}$ | $\mathbf{1 2 3}$ |
| $\mathbf{9 4 0}$ | $\mathbf{5 , 4 2 5}$ | $\mathbf{1 0 9}$ |
| $\mathbf{9 7 0}$ | $\mathbf{4 , 8 4 3}$ | $\mathbf{1 1 4}$ |
| $\mathbf{1 0 7 0}$ | $\mathbf{5 , 0 5 4}$ | $\mathbf{2 0 5}$ |

Ages from 4,843 to 5,804 million years old.

## Mount Isa, Queensland

These rocks were dated in 2006 by Mark Kendrick ${ }^{29}$ from the University of Melbourne. The data in tables 12 to 17 shows ages ${ }^{30}$ of Earth rocks from 4,700 to 10,000 million years old.

Table 12

| Sample | Million | Age |
| :---: | :---: | :---: |
| Eloise Mine | Years | Category |
| Cr-2 | 5,620 | Older Than Solar System |
| Cr-3 | $\mathbf{5 , 5 1 1}$ | Older Than Solar System |
| $\mathbf{3 0 0}$ | $\mathbf{6 , 1 2 7}$ | Older Than Solar System |
| 1400 | 5,370 | Older Than Solar System |
| Total | 4,804 | Older Than Earth |

Ages from 4,804 to 5,620 million years old.
Table 13

| Sample | Million | Age |
| :---: | :---: | :---: |
| Eloise Mine | Years | Category |
| 250 | 6,442 | Older Than Solar System |
| 350 | $\mathbf{6 , 3 9 3}$ | Older Than Solar System |
| 450 | 4,931 | Older Than Earth |
| 1200 | 4,760 | Older Than Earth |
| Total | 4,777 | Older Than Earth |

Ages from 4,760 to 6,442 million years old.

## Rocks Older Than The Earth

Table 14

| Sample | Million | Age |
| :---: | :---: | :---: |
| Eloise Mine | Years | Category |
| $\mathbf{2 0 0}$ | $\mathbf{7 , 4 1 2}$ | Older Than Solar System |
| 250 | $\mathbf{9 , 9 6 9}$ | Older Than Galaxy |
| 300 | $\mathbf{8 , 6 5 5}$ | Older Than Solar System |
| 350 | 5,871 | Older Than Solar System |
| 400 | $\mathbf{6 , 5 6 8}$ | Older Than Solar System |
| 450 | $\mathbf{6 , 0 6 0}$ | Older Than Solar System |
| $\mathbf{1 2 0 0}$ | $\mathbf{5 , 2 0 1}$ | Older Than Solar System |
| 1300 | 4,805 | Older Than Earth |
| 1400 | 5,049 | Older Than Solar System |
| Total | $\mathbf{5 , 6 0 1}$ | Older Than Solar System |

Ages from 4,805 to 9,969 million years old.

Table 15

| Sample | Million | Age |
| :---: | :---: | :---: |
| Osborne Mine | Years | Category |
| $\mathbf{3 0 0}$ | 7,715 | Older Than Solar System |

Table 16

| Sample | Million | Age |
| :---: | :---: | :---: |
| Railway Fault | Years | Category |
| 200 | $\mathbf{5 , 1 7 6}$ | Older Than Solar System |
| 350 | $\mathbf{4 , 7 5 9}$ | Older Than Earth |

Table 17

| Sample | Million | Age |
| :---: | :---: | :---: |
| Railway Fault | Years | Category |
| $\mathbf{C r}$ | $\mathbf{4 , 8 4 4}$ | Older Than Earth |
| Cr | $\mathbf{4 , 8 8 3}$ | Older Than Earth |
| Cr | $\mathbf{5 , 4 1 8}$ | Older Than Solar System |
| Cr | $\mathbf{5 , 2 3 8}$ | Older Than Solar System |

Ages from 4,844 to 5,418 million years old.

## Rocks Older Than The Earth

## Conclusion

Dalrymple states:
"Several events in the formation of the Solar System can be dated with considerable precision." ${ }^{31}$
Looking at some of the dating it is obvious that precision is much lacking. He then goes on:
"Biblical chronologies are historically important, but their credibility began to erode in the eighteenth and nineteenth centuries when it became apparent to some that it would be more profitable to seek a realistic age for the Earth through observation of nature than through a literal interpretation of parables." ${ }^{32}$

The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary.

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## www.creation.com

# Rocks Older Than The Universe <br> By Paul Nethercott <br> May 2012 

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." ${ }^{4}$ "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

How can Earth rocks be dated as being older than the Big Bang? Here are quotes from several articles taken from major geology magazines which give absolutely absurd dates.

## Trillion Year Old Rocks!

These rocks from Black Hills, South Dakota were dated in 1970 giving ridiculous dates. The oldest [Trillion Years!] is 60 times older than the Big Bang explosion. The article simply says: "Anomalous age data for pegmatite minerals." ${ }^{7}$

Table 1

| Table 5. |  | Rb-Sr Date | Rb-Sr Date |
| :---: | :---: | :---: | :---: |
| Sample/Mines Mineral | Mineral Type | Million Years | Billion Years |
| Hugo Mine | Albite | 7,100 | 7 |
| Hugo Mine | Apatite | 900,000 | 900 |
| Hugo Mine | Lithiophyllite | 53,000 | 53 |
| Tin Mountain | Montebraeite | 36,000 | 36 |
| Tin Mountain | Apatite | 75,000 | 75 |
| Bob Ingersoll Mine | Montebrasite | 81,000 | 81 |
| Bob Ingersoll Mine | Apatite | 460,000 | 460 |

## Rocks 18 Billion Years Old

This rock was from the Great Northern Peninsula, Newfoundland. It was dated in 1974. As the article says: "The most striking of these is the consistent pattern of anomalously high apparent ages obtained for high temperature fractions (i.e. fraction s corresponding to temperatures $>925-950^{\circ} \mathrm{C}$ ). These anomalously high apparent ages almost certainly reflect the presence of excess radiogenic argon." The table in the article ${ }^{9}$ lists 11 rock samples with radical discordant dates. The first two rocks have internal ages varying between the "youngest" and "oldest" by a factor of $2000 \%$ and $1000 \%$ respectively.

Table 2

| Maximum Age | Minimum Age | Difference | Difference |
| :---: | :---: | :---: | :---: |
| Million Years | Million Years | Million Years | Percentage |
| 18,620 | 651 | 17,969 | $2,760 \%$ |

## Rocks Older Than The Universe

## Rocks 80 Billion Years Old!

Some of these rocks have been dated to be five times older than the Big Bang explosion! These rocks from Yucca Mountain, Nevada were dated in 2008 by U-Th- Pb dating method.

Table 3

| Sample | Pb-206/U-238 | Pb-208/Th-232 | Error | Difference |
| :---: | :---: | :---: | :---: | :---: |
| Number | Million Years | Million Years | Million Years | Percentage |
| HD2059Pb4-Cc | 1,738 | 12,900 | 4,040 | 7,963 |
| HD2089APb1-Cc1 | 7,940 |  |  |  |
| HD2089APb1-Cc2a | 6,372 |  |  |  |
| HD2089APb1-Cc2b | 7,504 |  |  |  |
| HD2089APb1-Cc2c | 6,292 |  |  |  |
| HD2089APb1-Cc3 | 4,423 | 28,600 | $\mathbf{7 , 7 0 0}$ | 647 |
| HD2177Pb1-Cc | 20,209 | 1,555 | 140 | 7,296 |
| HD2233Pb1-Ch2 | 8 | $\mathbf{8 2 , 0 3 0}$ | 180,500 | $1,986,199$ |
| HD2233Pb2-Ch2 | 7 | 57,900 | 40,800 | $1,153,386$ |

As we can see form the table below that some of the dates are almost 2 million percent discordant. That means that the dating methods can give ages for the same rock that vary by a factor of 20,000 . One part of the rock is dated as being 20,000 times older than another.

Table 4

| Sample | Difference | Sample | Difference |
| :---: | :---: | :---: | :---: |
| Number | Percentage | Number | Percentage |
| HD2098Pb3-Cc | 1,094 | HD2059Pb4-Cc | 7,963 |
| HD2074Pb2-Cc1 | 1,224 | HD2062Pb1-Cc | 12,772 |
| HD2055Pb11-Cc | 1,246 | HD2074Pb1-Cc3 | 44,828 |
| HD2062Pb2-Cc | 1,311 | HD2089APb1-Cc1 | 49,625 |
| HD2055Pb12-Op | 1,467 | HD2089APb1-Cc2b | 50,027 |
| HD2055Pb12-Cc | 1,584 | HD2089APb1-Cc2c | $\mathbf{6 9 , 9 1 1}$ |
| HD2089APb2-Cc | 1,970 | HD2155Pb1-Cc | 121,400 |
| HD2109Pb1-Cc | 2,083 | HD2055Pb11-Op | 195,100 |
| HD2065Pb4-Cc | 2,691 | HD2233Pb2-Ch2 | $1,153,386$ |
| HD2177Pb1-Cc | 7,296 | HD2233Pb1-Ch2 | $1,986,199$ |

Rocks 22 Billion Years Old
This dating was done in 1990 on rocks from the Ouzzal granite unit in Algeria. Maluski used Argon dating and it gave dates over 22 billion years old. ${ }^{12}$

Table 5

| Sample | Maximum Age | Minimum Age | Average Age | Age Difference | Percent |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Name | Million Years | Million Years | Million Years | Million Years | Difference |
| A. TEK 58 plagioclase 1 | 13,435 | 1,800 | 7,043 | $\mathbf{1 1 , 6 3 5}$ | $746 \%$ |
| B. TEK 58 plagioclase 2 | $\mathbf{8 , 0 7 1}$ | 2,446 | $\mathbf{6 , 0 2 4}$ | 5,625 | $329 \%$ |
| C. TEK 58 plagioclase 3 | 15,407 | 1,214 | 3,857 | 14,193 | $1269 \%$ |
| D. TEK 58 plagioclase 4 | 10,776 | 1,800 | 4,650 | 8,976 | $598 \%$ |
| E. TEK 58 pyroxene | 11,621 | 5,744 | $\mathbf{9 , 9 0 9}$ | 5,877 | $202 \%$ |
| F. TEK 58 biotite | 4,522 | 1,700 | 2,147 | 2,822 | $266 \%$ |
| G. TEK 58 garnet | 22,090 | 3,716 | 11,685 | 18,374 | $594 \%$ |

## Rocks Older Than The Universe

Below we can see in table 6 some of the extremely discordant dates.
Table 6

| A. Plagioclase 1 | B. Plagioclase 2 | C. Plagioclase 3 | D. Plagioclase 4 | E. Pyroxene | G. Garnet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Million Years | Million Years | Million Years | Million Years | Million Years | Million Years |
| 5,062 | 5,008 | 6,045 | 5,360 | 9,150 | 7,361 |
| 6,027 | 5,410 | 7,995 | 5,564 | 9,276 | 8,311 |
| 6,303 | 5,712 | 11,804 | 6,424 | 9,564 | 8,906 |
| 6,489 | 5,739 | 15,407 | 6,452 | 9,684 | 10,232 |
| 7,492 | 5,892 |  | 7,318 | 9,874 | 10,310 |
| 9,228 | 5,983 |  | 7,689 | 9,899 | 10,790 |
| 11,783 | 6,453 |  | 10,776 | 9,943 | 11,448 |
| 13,263 | 6,785 |  |  | 10,097 | 11,568 |
| 13,287 | 6,939 |  |  | 10,102 | 11,961 |
| 13,435 | 7,372 |  |  | 10,314 | 12,780 |
|  | 7,779 |  |  | 10,521 | 13,750 |
|  | 8,071 |  |  | 10,578 | 14,689 |
|  |  |  |  | 10,610 | 16,224 |
|  |  |  |  | 10,617 | 19,945 |
|  |  |  |  | 10,685 | 20187 |
|  |  |  |  | 10,729 | 20,272 |
|  |  |  |  | 10,736 | 20,742 |
|  |  |  |  | 10,873 | 22,090 |
|  |  |  |  | 10,889 |  |
|  |  |  |  | 11,041 |  |
|  |  |  |  | 11,288 |  |
|  |  |  |  | 11,382 |  |
|  |  |  |  | 11,389 |  |
|  |  |  |  | 11,396 |  |
|  |  |  |  | 11,621 |  |

Maluski comments: "Apparent ages as old as $10-11 \mathrm{Ga}$ are obtained between 450 and 1100 C , which implies that the excess component is widely distributed over all the sites without a preferential location. The internal age discordance is mainly due to the low amount and variability of 39 Ar released at each temperature increment. This is probably because K occurs as microscopic impurities within pyroxene, the degassing of which is very irregular." ${ }^{12}$

## Volcanic Rocks 15 Billion Years Old

The article describes Rubidium-Strontium dating of volcanic rocks in the Highwood Mountains and Eagle Buttes, Montana, U.S.A. This was performed in 1994. Ages ${ }^{13}$ greater than the Big Bang date were obtained.

Table 7

| 6.46 | Billion Years Old |
| :---: | :---: |
| 6.83 | Billion Years Old |
| 10.8 | Billion Years Old |
| 15.5 | Billion Years Old |

"These extreme isotopic characteristics are accompanied by parent daughter ratios that give all the Highwood peridotites old model ages ( $\mathrm{Rb}-\mathrm{Sr}, 2.14-15.5 \mathrm{Ga} ; \mathrm{Sm}-\mathrm{Nd}, 2.78-6.83 \mathrm{Ga}$; Table 1 ) compared to the other ultramafic samples." ${ }^{14}$

## 15 Billion Years Old

This article ${ }^{15}$ refers to dating of xenoliths from the Kaapvaal craton in South Africa. These rocks were dated in 1995.

Table 8

|  | Table 8 |
| :---: | :---: |
| 8.5 | Billion Years Old |
| 10.2 | Billion Years Old |
| 11.1 | Billion Years Old |
| 15.6 | Billion Years Old |

Pearson's explanation is: "For example, several of the peridotite Re/Os model ages calculated using measured 187$\mathrm{Re} / 188$-Os (TM, in Table 2) either give geologically unreasonable ages or do not intersect the Bulk Earth evolution line at all. Walker et al. [14] reasoned that the highly refractory compositions of Kaapvaal peridotites could have led to complete removal of Re during formation." ${ }^{16}$

## Moon Rocks 28 Billion Years Old

The following dating was done in 1972. Table Nine ${ }^{18}$ gives ages twice as old as the Big Bang explosion date. Table Ten ${ }^{19}$ gives ages twice as old as the Moon and Solar System.

Table 9

| Pb-207 | Pb-206 | Pb-207 | Pb-208 |
| :---: | :---: | :---: | :---: |
| Pb-206 | U-238 | U-235 | Th-232 |
| Billion Years | Billion Years | Billion Years | Billion Years |
| 5.58 | 9.21 | 6.43 | 24.92 |
| 5.65 | 8.73 | 6.39 | 23.50 |
| 5.43 | 10.28 | 6.54 | 28.14 |

Table 10

| Pb-207 | Pb-206 | Pb-207 | Pb-208 |
| :---: | :---: | :---: | :---: |
| Pb-206 | U-238 | U-235 | Th-232 |
| Billion Years | Billion Years | Billion Years | Billion Years |
| 5.31 | 6.98 | 5.74 | 10.79 |
| 5.33 | 6.81 | 5.71 | 10.34 |
| 5.28 | 7.15 | 5.76 | 11.23 |

## Rocks 23 Billion Years Old

This article describes Rubidium-Strontium dating of Precious Metal Veins of the Coeur D'Alene Mining District, Idaho. This dating ${ }^{19}$ was done in 2002 and gave ages over 20 billion years old.

Table 10

| Sample | Age Million | Difference |
| :---: | :---: | :---: |
| Number | Years | Percentage |
| $858-07 \mathrm{G}$ | 4,475 |  |
| $858-07 \mathrm{H}$ | 1,727 | $159 \%$ |
| $858-07 \mathrm{~L}$ | 7,816 |  |
| $858-07 \mathrm{M}$ | 1,195 | $554 \%$ |
| $858-07 \mathrm{U}$ | 971 |  |
| $858-07 \mathrm{~V}$ | 2,630 | $171 \%$ |
| $858-08 \mathrm{C}$ | 1,855 |  |
| $858-08 \mathrm{D}$ | 6,105 | $229 \%$ |
| $858-08 \mathrm{AA}$ | 3,028 |  |
| $858-08 \mathrm{AB}$ | 588 | $415 \%$ |
| $858-09 \mathrm{D}$ | 1,490 |  |
| $858-09 \mathrm{E}$ | 754 | $98 \%$ |
| $858-09 \mathrm{~F}$ | 2,453 |  |
| $858-09 \mathrm{G}$ | 682 | $259 \%$ |
| $858-09 \mathrm{~J}$ | 719 |  |
| $858-09 \mathrm{~K}$ | 2,696 | $274 \%$ |
| $858-09 \mathrm{~L}$ | 395 |  |
| $858-09 \mathrm{M}$ | 1,465 | $270 \%$ |
| $918-13 \mathrm{~A}$ | 278 |  |
| $918-13 \mathrm{~B}$ | 2,209 | $694 \%$ |
| $918-13 \mathrm{C}$ | 23,312 |  |
| $918-13 \mathrm{D}$ | 968 | $2308 \%$ |
| $918-15 \mathrm{~L}$ | 873 |  |
| $918-15 M$ | 4,291 | $391 \%$ |

The samples are in pairs. Each pair is taken from the exact same location. Some dates are between two and twenty three times discordant for the one rock. The one dating method will give two different dates for the same rock! One date is twenty three times older than the younger one.

## Conclusion

Even though it is commonly claimed to be absolute proof of millions of years, there are many problems with radiometric dating. The recently published "Radioisotopes \& the Age of the Earth" "Earth's Catastrophic Past" and other publications by young earth creationists shows that accepting a literal view of the Genesis creation account and a young age of the earth can be defended scientifically and old age successfully rebutted.

## Exodus 20:8-11

8 Remember the Sabbath day, to keep it holy. 9 Six days shall you labour, and do all your work: 10 But the seventh day is the Sabbath of the LORD your God: in it you shall not do any work, you, nor your son, nor your daughter, your manservant, nor your maidservant, nor your cattle, nor your stranger that is within your gates: 11 For in six days the LORD made heaven and earth, the sea, and all that in them is, and rested the seventh day: wherefore the LORD blessed the Sabbath day, and hallowed it.

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# The Rubidium-Strontium Dating Method 

## By Paul Nethercott October 2012

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." 4 "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

If we run the isotopic ratios give in standard geology magazines through the computer program Isoplot ${ }^{7}$ we find that the Uranium/Thorium/Lead isotopic ratios in the rocks disagree radically with the Rubidium $/ \mathrm{Strontium}$ ages. $\mathrm{The} \mathrm{U} / \mathrm{Th} / \mathrm{Pb}$ ratios give ages older than the evolutionist age of the Earth, Solar System, Galaxy and Universe. How can Earth rocks be dated as being older than the Big Bang?

If we use isotopic formulas ${ }^{8-11}$ given in standard geology text we can arrive at ages from the $\mathrm{Rb} / \mathrm{Sr}$ and $\mathrm{Nd} / \mathrm{Sm}$ ratios. The formula for $\mathrm{Rb} / \mathrm{Sr}$ age is given as:
$t=\frac{2.303}{\lambda} \log \left(\frac{(87 S r / 86 S r)-(87 S r / 86 S r)_{0}}{(87 R b / 86 S r)}+1\right)$

Where $t$ equals the age in years. $\lambda$ equals the decay constant. $(87 \mathrm{Sr} / 86 \mathrm{Sr})=$ the current isotopic ratio. $(87 \mathrm{Sr} / 86 \mathrm{Sr})_{0}=$ the initial isotopic ratio. $(87 \mathrm{Rb} / 86 \mathrm{Sr})=$ the current isotopic ratio. The same is true for the formula below.
$t=\frac{2.303}{\lambda} \log \left(\frac{(143 N d / 144 N d)-(143 N d / 144 N d)_{0}}{(147 S m / 144 N d)}+1\right)$

Here are examples of isotopic ratios taken from several articles in major geology magazines which give absolutely absurd dates.

## Early Archaean Rocks At Fyfe Hills

These early Archaean rocks from Fyfe Hills in Antarctica were dated in 1982 by scientists form the Australian Bureau of Mineral Resources, The University of Adelaide, Adelaide, and the University of Tasmania, Hobart. ${ }^{12}$ Several isotopic samples ${ }^{13}$ gave negative ages [-24 billion, -14 billion, -108 billion, -43 billion]. How can a rock that exists in the present and formed in the past have formed 108 billion years in the future?

| 87Rb/86Sr, Ages Dating Summary |
| :--- |
| Average |
| Maximum |
| Minimum |
| Difference |

Table 1
The Uranium/Lead ratios ${ }^{14}$ give uniform values of 2,500 million years old. The thirty $87 \mathrm{Rb} / 86 \mathrm{Sr}$ ratios have nineteen that give ages much older [3,039 to 4,925 Million years] and seven [1,835 to -108,362 Million years] much younger. The author's choice of age is purely arbitrary.

## Shock-Melted Antarctic LL-Chondrites

These meteorite samples were dated in 1990 by scientists from the Department of Earth Sciences, Kohe University, Japan. ${ }^{15}$ According to the article ${ }^{16}$ the meteorite is 4.55 billion years old. The article claims that the maximum range of model ages is 3.11 to 7.33 billion years. ${ }^{17}$ If we run the isotopic ratios through Microsoft Excel we get ages from 4 to 21 billion years old. Thirty six dates are over 5 billion years. Nine are over 10 billion years. If the Solar System is less than 5 billion years old how can the meteorite be older than the assumed age of the galaxy [ 10 billion years]?

| 87Rb/86Sr, Maximum Ages |  |  |
| :---: | :---: | :---: |
| Age | Age | Age |
| Million Years | Million Years | Million Years |
| 21,611 | $\mathbf{9 , 0 1 5}$ | $\mathbf{6 , 7 5 6}$ |
| 14,466 | $\mathbf{8 , 9 8 8}$ | $\mathbf{6 , 5 5 6}$ |
| 12,968 | $\mathbf{8 , 9 2 1}$ | $\mathbf{6 , 1 9 2}$ |
| 12,354 | $\mathbf{8 , 8 6 9}$ | $\mathbf{6 , 1 5 7}$ |
| 11,946 | $\mathbf{8 , 7 5 3}$ | $\mathbf{5 , 9 8 1}$ |
| 10,868 | $\mathbf{8 , 6 7 5}$ | $\mathbf{5 , 6 7 7}$ |
| 10,727 | $\mathbf{8 , 5 5 6}$ | $\mathbf{5 , 4 9 1}$ |
| 10,623 | $\mathbf{8 , 4 0 5}$ | $\mathbf{5 , 4 8 3}$ |
| 10,162 | $\mathbf{8 , 1 5 3}$ | $\mathbf{5 , 4 5 8}$ |
| 9,888 | $\mathbf{7 , 5 9 0}$ | $\mathbf{5 , 4 5 3}$ |
| 9,237 | $\mathbf{6 , 9 4 7}$ | $\mathbf{5 , 3 8 8}$ |
| 9,161 | $\mathbf{6 , 8 9 9}$ | $\mathbf{5 , 3 1 9}$ |

87Rb/86Sr, Ages Dating Summary

| Average | $\mathbf{8 , 5 8 5}$ |
| :---: | :---: |
| Maximum | $\mathbf{2 1 , 6 1 1}$ |
| Minimum | $\mathbf{3 , 9 6 9}$ |
| Difference | $\mathbf{1 7 , 6 4 2}$ |

Table 3

## Diamonds And Mantle-Derived Xenoliths

These samples from South African diamond mines were dated in 1979 by scientist from the University of the Witwatersrand, Johannesburg, South Africa. According to the isochron diagrams ${ }^{17}$ the age of the sample is 2.4 billion years. If we run the Lead isotope ratios ${ }^{18}$ through Isoplot we get the following values:

Lead Isotope Ages

| Lead |  |
| :---: | :---: |
| Average | $\mathbf{4 , 9 9 5}$ |
| Maximum | $\mathbf{5 , 2 4 9}$ |
| Minimum | $\mathbf{4 , 8 8 5}$ |
| Std Deviation | $\mathbf{1 2 2}$ |

Table 4
If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{18}$ through Microsoft Excel we get the following values:

| 87Rb/86Sr, Ages Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{2 8 , 4 2 9}$ |
| Maximum | $\mathbf{9 1 , 9 5 7}$ |
| Minimum | $\mathbf{3 , 2 5 7}$ |
| Difference | $\mathbf{8 8 , 7 0 0}$ |

Table 5
There is almost a 90 billion years difference between the oldest and youngest dates. Below we can see some of the maximum ages and how stupid they are.
$\underline{\text { 87Rb/86Sr, Maximum Ages }}$

| Age | Age |
| :---: | :---: |
| Million Years | Million Years |
| 91,957 | 18,139 |
| 53,584 | 17,036 |
| 51,582 | 15,716 |
| 43,201 | 15,340 |
| 33,542 | 13,633 |
| 24,366 | 12,202 |

Table 6

## 87Rb/87Sr Isochron Of The Norton County Achondrite

This meteorite dating was done in 1967 by scientist ${ }^{20}$ from the California Institute of Technology. In this article we will find that dating done 45 years later [2008] is giving just as absurd results. According to the Argon dating results ${ }^{21}$ the meteorite is between 2.3 and 5.1 billion years old. If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{22}$ through Microsoft Excel we get the following values:

87Rb/86Sr, Ages Dating Summary

| Average | $\mathbf{1 , 3 7 5}$ |
| :---: | :---: |
| Maximum | $\mathbf{4 , 8 7 1}$ |
| Minimum | $\mathbf{- 1 6 , 2 7 7}$ |
| Difference | $\mathbf{2 1 , 1 4 9}$ |

Table 7

## Base and Precious Metal Veins

According to the article the dating [Coeur D'Alene Mining District, Idaho] was done in 2002 by scientists from the U.S. Geological Survey, California, the Department of Earth and Planetary Sciences, Washington University, Saint Louis, Missouri, the Lawrence Livermore National Laboratory, Livermore, California and the Sunshine Precious Metals Company, Idaho. ${ }^{22}$ If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{23}$ from Table 1 in the article through Microsoft Excel we get the following values:

87Rb/86Sr, Ages Dating Summary

| Average | 128,708 |
| :---: | :---: |
| Maximum | 508,074 |
| Minimum | $\mathbf{7 , 9 9 0}$ |
| Difference | $\mathbf{5 1 6 , 0 6 4}$ |
| Table 8 |  |

There is a 500 billion year difference between the youngest and oldest dates. The average age is over 120 billion years. Below we can see some of the maximum ages and how stupid they are.

87Rb/86Sr, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| Million Years | Million Years | Million Years | Million Years |
| 508,074 | 157,304 | 125,399 | $\mathbf{8 6 , 4 8 3}$ |
| 314,336 | 151,142 | 114,796 | $\mathbf{7 5 , 6 8 4}$ |
| 302,580 | 150,089 | 114,795 | $\mathbf{7 2 , 9 1 5}$ |
| 287,077 | 149,802 | 113,950 | $\mathbf{7 1 , 2 2 5}$ |
| 207,257 | 144,826 | 111,884 | $\mathbf{6 9 , 7 2 9}$ |
| 201,185 | 142,977 | 110,719 | $\mathbf{6 3 , 9 3 4}$ |
| 191,104 | 138,115 | 109,164 | $\mathbf{6 3 , 4 0 6}$ |
| 190,573 | 134,866 | 108,617 | $\mathbf{6 1 , 7 4 0}$ |
| 189,167 | 134,061 | 108,278 | $\mathbf{5 6 , 7 3 5}$ |
| 186,066 | 134,039 | 102,140 | $\mathbf{5 2 , 1 1 7}$ |
| 183,607 | 132,885 | 99,952 | 47,926 |
| 183,225 | 132,746 | $\mathbf{9 3 , 8 4 8}$ | 46,968 |
| 163,764 | 131,670 | $\mathbf{8 9 , 2 4 6}$ | $\mathbf{3 9 , 9 4 4}$ |
| 158,436 | 130,664 | $\mathbf{8 8 , 6 2 6}$ | $\mathbf{3 7 , 6 2 3}$ |
| 158,282 | 129,495 | $\mathbf{8 7 , 7 0 8}$ | 16,153 |

Table 9
If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{24}$ from Table 2 in the article through Microsoft Excel we get the following values:
87Rb/86Sr, Ages Dating Summary

| Average | 139,471 |
| :---: | :---: |
| Maximum | 508,074 |
| Minimum | 12,314 |
| Difference | 520,388 |

Table 10
There is a 520 billion year difference between the youngest and oldest dates. The average age is almost 140 billion years. Below we can see some of the maximum ages and how stupid they are. The oldest dates is over half a trillion years old.

| 87Rb/86Sr, Maximum Ages |  |  |
| :---: | :---: | :---: |
| Age | Age | Age |
| Million Years | Million Years | Million Years |
| 508,074 | 147,429 | 87,708 |
| 314,336 | $\mathbf{1 3 8 , 8 8 2}$ | $\mathbf{8 4 , 7 1 6}$ |
| 165,542 | 118,679 | $\mathbf{8 2 , 2 9 4}$ |
| 157,714 | 98,450 | $\mathbf{5 9 , 0 8 0}$ |
| 157,589 | $\mathbf{9 1 , 4 5 0}$ | 45,663 |
| 151,317 | $\mathbf{8 9 , 2 3 6}$ | $\mathbf{1 2 , 3 1 4}$ |
| Table 11 |  |  |

If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{\mathbf{2 5}}$ from Table 4 in the article through Microsoft Excel we get the following values:

87Rb/86Sr, Ages Dating Summary

| Average | $\mathbf{8 8 , 5 7 1}$ |
| :---: | :---: |
| Maximum | $\mathbf{2 8 8 , 7 7 5}$ |
| Minimum | $\mathbf{- 1 7 0 , 2 3 2}$ |
| Difference | $\mathbf{4 5 9 , 0 0 7}$ |

Table 12
There is a 560 billion year difference between the youngest and oldest dates. The average age is almost 90 billion years. Below we can see some of the maximum ages and how stupid they are. The oldest date is almost 300 billion years old. The youngest is negative 170 billion years old.

87Rb/86Sr, Maximum Ages

| Age | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Million Years | Million Years | Million Years | Million Years | Million Years | Million Years |
| $\mathbf{2 8 8 , 7 7 5}$ | $\mathbf{9 7 , 2 4 2}$ | $\mathbf{9 4 , 8 1 9}$ | $\mathbf{9 3 , 0 7 9}$ | $\mathbf{9 0 , 8 9 1}$ | $\mathbf{8 5 , 9 2 4}$ |
| $\mathbf{1 0 2 , 7 1 6}$ | $\mathbf{9 7 , 1 1 7}$ | $\mathbf{9 4 , 4 6 5}$ | $\mathbf{9 2 , 9 9 5}$ | $\mathbf{9 0 , 7 0 0}$ | $\mathbf{8 5 , 8 0 5}$ |
| 101,380 | $\mathbf{9 7 , 0 3 3}$ | $\mathbf{9 4 , 4 5 3}$ | $\mathbf{9 2 , 9 7 2}$ | $\mathbf{9 0 , 5 3 6}$ | $\mathbf{8 5 , 2 6 3}$ |
| 100,277 | $\mathbf{9 6 , 7 9 2}$ | $\mathbf{9 4 , 4 3 1}$ | $\mathbf{9 2 , 9 6 7}$ | $\mathbf{9 0 , 3 6 7}$ | $\mathbf{8 4 , 9 9 0}$ |
| 99,779 | $\mathbf{9 6 , 6 8 7}$ | $\mathbf{9 4 , 4 0 8}$ | $\mathbf{9 2 , 9 6 3}$ | $\mathbf{9 0 , 1 2 7}$ | $\mathbf{8 3 , 9 1 4}$ |
| $\mathbf{9 9 , 6 8 3}$ | $\mathbf{9 6 , 6 5 5}$ | $\mathbf{9 4 , 3 9 7}$ | $\mathbf{9 2 , 9 1 5}$ | $\mathbf{9 0 , 0 8 9}$ | $\mathbf{8 3 , 5 8 4}$ |
| $\mathbf{9 9 , 3 6 9}$ | $\mathbf{9 6 , 6 0 2}$ | $\mathbf{9 4 , 3 4 5}$ | $\mathbf{9 2 , 8 7 8}$ | $\mathbf{9 0 , 0 1 8}$ | $\mathbf{8 2 , 6 3 9}$ |
| $\mathbf{9 9 , 2 3 8}$ | $\mathbf{9 6 , 2 9 3}$ | $\mathbf{9 4 , 3 3 9}$ | $\mathbf{9 2 , 8 6 3}$ | $\mathbf{8 9 , 8 3 8}$ | $\mathbf{8 0 , 9 6 2}$ |
| $\mathbf{9 9 , 1 7 7}$ | $\mathbf{9 6 , 2 5 2}$ | $\mathbf{9 4 , 2 4 9}$ | $\mathbf{9 2 , 8 2 9}$ | $\mathbf{8 9 , 7 3 6}$ | $\mathbf{8 0 , 2 1 4}$ |
| $\mathbf{9 8 , 9 4 8}$ | $\mathbf{9 6 , 2 3 6}$ | $\mathbf{9 4 , 2 3 5}$ | $\mathbf{9 2 , 6 3 4}$ | $\mathbf{8 9 , 4 6 6}$ | $\mathbf{7 9 , 0 8 2}$ |
| $\mathbf{9 8 , 7 6 5}$ | $\mathbf{9 6 , 0 4 3}$ | $\mathbf{9 4 , 1 3 9}$ | $\mathbf{9 2 , 6 3 0}$ | $\mathbf{8 9 , 2 3 6}$ | $\mathbf{7 8 , 0 5 3}$ |
| $\mathbf{9 8 , 7 3 6}$ | $\mathbf{9 5 , 9 8 1}$ | $\mathbf{9 4 , 1 0 0}$ | $\mathbf{9 2 , 3 7 4}$ | $\mathbf{8 9 , 1 7 1}$ | $\mathbf{7 6 , 7 5 0}$ |
| $\mathbf{9 8 , 6 8 5}$ | $\mathbf{9 5 , 8 9 4}$ | $\mathbf{9 3 , 9 2 8}$ | $\mathbf{9 2 , 3 1 5}$ | $\mathbf{8 8 , 9 3 2}$ | $\mathbf{7 6 , 2 5 6}$ |
| $\mathbf{9 8 , 5 9 1}$ | $\mathbf{9 5 , 7 6 1}$ | $\mathbf{9 3 , 8 4 1}$ | $\mathbf{9 2 , 3 0 9}$ | $\mathbf{8 8 , 8 7 6}$ | $\mathbf{7 6 , 1 7 8}$ |
| $\mathbf{9 8 , 4 3 6}$ | $\mathbf{9 5 , 7 1 1}$ | $\mathbf{9 3 , 7 6 6}$ | $\mathbf{9 2 , 2 0 5}$ | $\mathbf{8 8 , 5 4 0}$ | $\mathbf{7 5 , 0 4 8}$ |
| $\mathbf{9 8 , 2 8 5}$ | $\mathbf{9 5 , 6 0 9}$ | $\mathbf{9 3 , 7 3 0}$ | $\mathbf{9 2 , 1 4 0}$ | $\mathbf{8 8 , 2 9 5}$ | $\mathbf{7 2 , 0 0 4}$ |
| $\mathbf{9 8 , 2 4 3}$ | $\mathbf{9 5 , 5 2 2}$ | $\mathbf{9 3 , 5 8 2}$ | $\mathbf{9 2 , 1 0 8}$ | $\mathbf{8 7 , 5 8 5}$ | $\mathbf{7 0 , 4 7 9}$ |
| $\mathbf{9 7 , 9 7 9}$ | $\mathbf{9 5 , 5 1 0}$ | $\mathbf{9 3 , 5 7 4}$ | $\mathbf{9 1 , 9 0 6}$ | $\mathbf{8 7 , 3 5 9}$ | $\mathbf{6 9 , 7 9 0}$ |
| $\mathbf{9 7 , 8 3 0}$ | $\mathbf{9 5 , 3 8 8}$ | $\mathbf{9 3 , 5 0 4}$ | $\mathbf{9 1 , 6 7 4}$ | $\mathbf{8 7 , 2 6 0}$ | $\mathbf{5 5 , 1 5 7}$ |
| $\mathbf{9 7 , 6 2 8}$ | $\mathbf{9 5 , 2 1 8}$ | $\mathbf{9 3 , 4 0 1}$ | $\mathbf{9 1 , 6 5 0}$ | $\mathbf{8 6 , 8 2 6}$ | $\mathbf{5 3 , 5 6 8}$ |
| $\mathbf{9 7 , 6 0 4}$ | $\mathbf{9 5 , 1 9 7}$ | $\mathbf{9 3 , 3 9 4}$ | $\mathbf{9 1 , 4 3 5}$ | $\mathbf{8 6 , 6 9 1}$ | $\mathbf{5 1 , 9 3 4}$ |
| $\mathbf{9 7 , 5 4 5}$ | $\mathbf{9 5 , 1 8 5}$ | $\mathbf{9 3 , 2 7 1}$ | $\mathbf{9 1 , 2 3 8}$ | $\mathbf{8 6 , 4 7 4}$ | $\mathbf{- 3 9 , 2 0 7}$ |
| $\mathbf{9 7 , 4 2 1}$ | $\mathbf{9 5 , 1 2 5}$ | $\mathbf{9 3 , 1 9 9}$ | $\mathbf{9 1 , 1 8 9}$ | $\mathbf{8 6 , 1 3 6}$ | $\mathbf{- 8 9 , 6 5 6}$ |
| $\mathbf{9 7 , 4 0 2}$ | $\mathbf{9 4 , 9 9 4}$ | $\mathbf{9 3 , 1 2 4}$ | $\mathbf{9 1 , 0 0 5}$ | $\mathbf{8 6 , 0 5 0}$ | $\mathbf{\mathbf { 1 7 0 , 2 3 2 }}$ |
|  |  |  |  |  |  |

Table 13

## The Munchberg Massif, Southern Germany

According the article, this dating was done in 1990 by scientists from the Koln University, Germany and the Scripps Institution of Oceanography, La Jolla, California. ${ }^{26}$ There is an 8 billion year difference between the youngest and oldest dates.

| 87 $\mathbf{R b}$ /86Sr, Ages Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{1 , 1 0 5}$ |
| Maximum | $\mathbf{7 , 8 3 4}$ |
| Minimum | $\mathbf{- 2 9 6}$ |
| Difference | $\mathbf{8 , 1 3 0}$ |

## Table 14

## Rocks of the Central Wyoming Province

These rock samples were dated in 2005 by scientists from the University of Wyoming. ${ }^{27}$ If we run the Rubidium/Strontium and Neodymium/Samarium isotope ratios ${ }^{28}$ from the article through Microsoft Excel we get the following values:

Ages Dating Summary

| Dating | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ | $\mathbf{1 4 7 S m} / \mathbf{1 4 4 N d}$ | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ |
| Average | 2,863 | $\mathbf{2 , 8 6 9}$ | $\mathbf{5 , 1 2 3}$ | $\mathbf{1 7 , 8 9 9}$ | $\mathbf{1 1 , 9 0 6}$ |
| Maximum | 2,952 | 2,954 | $\mathbf{5 , 2 9 4}$ | $\mathbf{3 8 , 7 4 6}$ | $\mathbf{1 8 , 9 8 5}$ |
| Minimum | $\mathbf{2 , 6 3 0}$ | $\mathbf{2 , 6 3 1}$ | $\mathbf{4 , 6 6 2}$ | $\mathbf{6 , 6 5 0}$ | $\mathbf{7 , 2 9 4}$ |
| Std Deviation | $\mathbf{3 8}$ | $\mathbf{3 9}$ | $\mathbf{1 5 2}$ | $\mathbf{9 , 7 5 4}$ | $\mathbf{3 , 2 9 8}$ |

Table 15

The Uranium/Lead dates ${ }^{29}$ are up to sixteen billion years older than the Rubidium/Strontium and Neodymium/Samarium dates. The Thorium/Lead dates are up to thirty six billion years older. The so called true age is just a guess.

## Basalts From Apollo 15

According the article, this Moon rock dating was done in 1972 by scientists from the California Institute of Technology, Pasadena, California. ${ }^{30}$ According to the essay the rock is 3.4 billion years old. 31 If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{32}$ from Table 4 in the article through Microsoft Excel we get the following values:

Rb/Sr Age Dating Summary

| Average | 3,045 |
| :---: | :---: |
| Maximum | $\mathbf{2 7 , 2 1 1}$ |
| Minimum | $\mathbf{- 3 , 8 0 8}$ |
| Difference | $\mathbf{3 1 , 0 1 9}$ |

Table 16
Of the 21 isotopic ratios, seven were below 500 million years old. Two were over six billion years old.

## History Of The Pasamonte Achondrite

According to the article this meteorite specimen was dated in 1977 by scientists from the United States Geological Survey, Colorado and the Department of Chemistry and Geochemistry, Colorado School of Mines. ${ }^{33}$ The article states that Rubidium/Strontium dating affirms that this material is 4.5 billion years old. ${ }^{34}$ If we run the various isotope ratios ${ }^{34}$ from two different tables in the article through Microsoft Excel we get the following values respectively:

| U/Th/Pb Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Summary | 206Pb/238U | 207Pb/235U | 207Pb/206Pb | 208Pb/232Th |
| Average | $\mathbf{3 , 0 8 8}$ | $\mathbf{3 , 6 6 6}$ | $\mathbf{4 , 5 6 6}$ | $\mathbf{2 , 2 6 3}$ |
| Maximum | 5,694 | 5,032 | 4,963 | $\mathbf{1 4 , 8 0 0}$ |
| Minimum | 103 | 865 | 4,440 | $\mathbf{- 1 0 , 7 0 0}$ |
| Difference | 5,591 | 4,167 | 523 | $\mathbf{2 5 , 5 0 0}$ |
| Table 17 |  |  |  |  |

If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{34}$ from the article through Microsoft Excel we get the following values:

Rb/Sr Age Dating Summary

| Average |  |
| :---: | :---: |
| Maximum | $\mathbf{4 , 4 0 3}$ |
| Minimum | $\mathbf{2 , 4 1 2}$ |
| Difference | $\mathbf{4 , 2 6 2}$ |

Table 18
The Thorium/Lead dates are up to twelve billion years older. The so called true age is just a guess.

## Sr Isotopic Composition Of Afar Volcanics

According to the article ${ }^{35}$ this specimen [basalts from the Afar depression in Ethiopia] was dated in 1977 by scientists from Italy and France. The article states that the formation is of the late Quaternary period and thus very young. If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{36}$ from the article through Microsoft Excel we get the following values:

| Rb/Sr Age Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{1 8 3}$ |
| Maximum | $\mathbf{2 , 2 6 0}$ |
| Minimum | $\mathbf{- 1 0 8}$ |
| Difference | $\mathbf{2 , 3 6 8}$ |

Table 19
As far as the rocks being of a Quaternary age, the dates just don't line up.

## Orogenic Lherzolite Complexes

According to the article ${ }^{37}$ this specimen from Gibraltar was dated in 1979 by scientists from France. According to the article ${ }^{38}$ the maximum age of the samples is 103 million years. If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{39}$ from the two different tables in the article [Tables 2 and 3] through Microsoft Excel we get the following values respectively:

| Rb/Sr Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Summary | Table 2 | Table 3 |
| Average | $-52,203$ | $-29,099$ |
| Maximum | $-2,229$ | $-1,258$ |
| Minimum | $-\mathbf{- 1 3 5 , 1 4 0}$ | $-102,498$ |
| Difference | 132,911 | 101,240 |
| Table 20 |  |  |

The dates are light years different from what the essay claims. They are just absurd.

## Isotopic Geochemistry ( $\mathbf{O s}, \mathbf{S r}, \mathbf{P b}$ )

According to the article ${ }^{40}$ this specimen [the Golda Zuelva and Mboutou anorogenic complexes, North Cameroun] was dated in 1982 by scientists from France. According to the article ${ }^{40}$ the maximum age of the sample is 66 million years. If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{41}$ from the two different tables in the article [Tables 1and 2] through Microsoft Excel we get the following values respectively:

Age Dating Summary

|  | Age Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dating | 87Rb/86Sr | 87Rb/86Sr | Pb207/Pb206 |  |
| Summary | Age | Age | Age |  |
| Average | 321 | 57 | 4,982 |  |
| Maximum | 1,635 | 141 | 5,080 |  |
| Minimum | 52 | 0 | 4,932 |  |
| Difference | 1,687 | 141 | 10,012 |  |
| Table 21 |  |  |  |  |

If we run the $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ isotope ratios ${ }^{42}$ from the article [Table 3] through Microsoft Excel we get the following values respectively:

| Lead Isotope Ages |  |
| :---: | ---: |
| Age | Age |
| $\mathbf{5 , 0 8 0}$ | $\mathbf{4 , 9 6 4}$ |
| $\mathbf{5 , 0 4 8}$ | $\mathbf{4 , 9 5 8}$ |
| 4,990 | 4,957 |
| 4,984 | 4,938 |
| 4,980 | 4,932 |
| 4,975 |  |
| Table 22 |  |

The so called true age is just a guess.

## Cretaceous-Tertiary Boundary Sediments

According to the article ${ }^{43}$ this specimen [from the Barranco del Gredero, Caravaca, Spain] was dated in 1983 by scientists from University of California, Los Angeles, the United States Geological Survey, and the Geological Institute, University of Amsterdam. According to the article ${ }^{44}$ the maximum age of the sample is 65 million years. If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{44}$ from the article through Microsoft Excel we get the following values respectively:

| Rb/Sr Age Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{7 4 0}$ |
| Maximum | $\mathbf{5 , 1 5 7}$ |
| Minimum | $\mathbf{- 2 6 6}$ |
| Difference | 5,423 |
| Table 23 |  |

Out of the 16 dates derived from isotopic ratios, ten were over 100 million years old. Two were over 4 billion years old. One was negative 266 million years old. How can a rock that formed in the past have a negative age! The choice of 65 million years is just a guess.

## Correlated N D, Sr And Pb Isotope Variation

According to the article ${ }^{\overline{45}}$ this specimen [Walvis Ridge, Walvis Bay] was dated in 1982 by scientists from the Massachusetts Institute of Technology, and the Department of Geochemistry, University of Cape Town, South Africa. According to the article ${ }^{45}$ the age of the sample is 70 million years. If we run the various isotope ratios ${ }^{46}$ from the article through Microsoft Excel we get the following values respectively:

Age Dating Summary

| Summary | Pb207/Pb206 | 147Sm/144Nd | 87Rb/86Sr |
| :---: | :---: | :---: | :---: |
| Average | 5,033 | 70 | $\mathbf{6 4}$ |
| Maximum | 5,061 | 70 | 93 |
| Minimum | 5,004 | 69 | 0 |
| Difference | 57 | 140 | 93 |

## A Depleted Mantle Source For Kimberlites

According to the article ${ }^{47}$ this specimen [kimberlites from Zaire] was dated in 1984 by scientists from Belgium. According to the article ${ }^{48}$ the age of the samples is 70 million years. If we run the various isotope ratios ${ }^{49}$ from the article through Microsoft Excel we get the following values respectively:

Age Dating Summary

| Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Summary | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{8 7 R b} / 86 \mathrm{Sr}$ | $\mathbf{1 4 7 S m} / \mathbf{1 4 4 N d}$ |
| Average | 4,977 | 4,810 | 86 | $\mathbf{7 2}$ |
| Maximum | $\mathbf{5 , 0 1 7}$ | $\mathbf{1 0 , 8 7 0}$ | $\mathbf{1 4 6}$ | $\mathbf{8 0}$ |
| Minimum | 4,909 | $\mathbf{1 , 3 9 1}$ | $\mathbf{5 0}$ | $\mathbf{6 3}$ |
| Difference | $\mathbf{1 0 8}$ | $\mathbf{9 , 4 7 8}$ | $\mathbf{1 9 6}$ | $\mathbf{1 7}$ |

Table 25

The $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ maximum age is 34 times older than the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ maximum age. The $206 \mathrm{~Pb} / 238 \mathrm{U}$ maximum age is 74 times older than the $147 \mathrm{Sm} / 144 \mathrm{Nd}$ maximum age. There is a 10.8 billion year difference between the oldest and youngest age attained.

## Sm-Nd Isotopic Systematics

According to the article ${ }^{\mathbf{5 0}}$ this specimen [Enderby Land, East Antarctic] was dated in 1984 by scientists from the Australian National University, Canberra, and the Bureau of Mineral Resources, Canberra. According to the article ${ }^{50}$ the age of the sample is 3,000 million years. If we run the $\mathrm{Rb} / \mathrm{Sr}$ isotope ratios ${ }^{51}$ from the article through Microsoft Excel we get the following values respectively:

Rb/Sr Age Dating Summary

| Average | $-\mathbf{8 7 3}$ |
| :---: | :---: |
| Maximum | $\mathbf{3 , 4 8 4}$ |
| Minimum | $-\mathbf{- 2 5 , 1 2 1}$ |
| Difference | $\mathbf{2 8 , 6 0 5}$ |

Table 26
There is almost a 30 billion year difference between the oldest and youngest dates.

## Strontium, Neodymium And Lead Compositions

According to the article ${ }^{52}$ this specimen [Snake River Plain, Idaho] was dated in 1985 by scientists from the Geology Department, Rice University, Houston, Texas, the Earth Sciences Department, Open University, England and the Geology Department, Ricks College, Idaho. According to the article ${ }^{52}$ the age of the sample is 3.4 billion years. If we run the various isotope ratios ${ }^{53}$ from the article through Microsoft Excel we get the following values respectively:

Age Dating Summary

| Summary | Pb207/Pb206 | Pb207/Pb206 | 87Rb/86Sr |
| :---: | :---: | :---: | :---: |
| Average | $\mathbf{5 , 1 4 3}$ | $\mathbf{5 , 1 3 8}$ | $\mathbf{4 0 , 0 5 2}$ |
| Maximum | $\mathbf{5 , 3 6 2}$ | $\mathbf{5 , 3 1 4}$ | $\mathbf{2 0 5 , 0 9 3}$ |
| Minimum | 4,698 | 4,940 | 1,443 |
| Difference | 664 | 374 | $\mathbf{4}$ 203,650 |
| Table 27 |  |  |  |

The Lead isotope ratios from two different tables give dates 200 billion years younger than the $\mathrm{Rb} / \mathrm{Sr}$ isotope ratios. The Average age of the $\mathrm{Rb} / \mathrm{Sr}$ isotope ratios is 40 billion years. Below we can see some of the maximum ages and how stupid they are.
$\underline{\text { 87Rb/86Sr, Maximum Ages }}$

| Age | Age |
| :---: | :---: |
| Million Years | Million Years |
| 205,093 | 11,974 |
| 189,521 | 11,908 |
| 188,777 | 9,960 |
| 95,450 | 9,101 |
| 52,643 | $\mathbf{7 , 1 2 4}$ |
| 13,119 | $\mathbf{6 , 0 2 2}$ |
| 12,220 | 5,089 |
| Table 28 |  |
|  |  |
|  |  |

## Trace Element And Sr And Nd Isotope

According to the article ${ }^{54}$ this specimen [West Germany] was dated in 1986 by scientists from Germany and California. According to the article ${ }^{54}$ the age of the samples is 2 billion years. If we run the various isotope ratios ${ }^{55}$ from the article through Microsoft Excel we get the following values respectively:

| Rb/Sr Age Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{4 1 , 5 7 3}$ |
| Maximum | $\mathbf{1 7 5 , 2 8 9}$ |
| Minimum | $\mathbf{- 3 0 , 7 3 4}$ |
| Difference | $\mathbf{2 0 6 , 0 2 2}$ |

Table 29
Many of the $\mathrm{Rb} / \mathrm{Sr}$ isotopic ratios would not produce proper ages. Those that did gave absurd values. Below are some dates taken from another table ${ }^{56}$ in the original article.
$\underline{\mathrm{Rb} / \mathbf{S r} \text { and } \mathrm{Sm} / \mathbf{N d} \text { Age Dating Summary }}$

| TABLE 5 | Sm-Nd | Rb-Sr |
| :---: | :---: | :---: |
| Sample | Age | Age |
| Ib/K1 | 2,090 | 2,210 |
| Ib/8 | 2,900 | 1,790 |
| D1 | 1,450 | 1,660 |
| Ib/5 | 1,100 | 1,430 |
| D45 | 1,630 | 530 |
| D58 | $\mathbf{3 , 2 0 0}$ | 1,930 |
| Table 30 |  |  |

## The Southeast Australian Lithosphere Mantle

According to the article ${ }^{58}$ this specimen was dated in 1987 by scientists from The Australian National University. According to the article ${ }^{58}$ the age of the samples is 1.5 billion years. If we run the various isotope ratios ${ }^{59}$ from two different tables in the article through Microsoft Excel we get the following values respectively:
Rb/Sr Age Dating Summary

| Average | 1,905 | 42,639 |  |
| :---: | :---: | :---: | :---: |
| Maximum | 11,657 | 218,042 |  |
| Minimum | 134 | $-15,716$ |  |
| Difference | 11,523 | 233,758 |  |
| Table 31 |  |  |  |

Below we can see the maximum ages obtained from the second table. The oldest age is 18 times older than the Big Bang explosion. It is sixty two times older than the so called age of the Earth.

87Rb/86Sr, Maximum Ages

| Age |  |
| :---: | :---: |
| 218,042 | Age |
| $\mathbf{6 4 , 7 7 0}$ | $\mathbf{4 5 , 2 0 7}$ |
| 54,457 | 26,113 |
| 48,074 | 17,246 |
| 45,734 | 11,813 |
|  |  |

Table 32

## Strontium, Neodymium and Lead Isotopic

According to the article ${ }^{60}$ this specimen was dated in 1988 by scientists from the Department of Terrestrial Magnetism. Carnegie Institution of Washington. Throughout the article the author admits that the dates are contradicting and unreliable: "For sample 7541. the apatite eclogite, the range observed in both $\mathrm{Rh} / \mathrm{Sr}$ and $\mathrm{Sm} / \mathrm{Nd}$ for the whole-rock and mineral separates is quite small resulting in very imprecise "ages" of 400 Ma for $\mathrm{Rb}-\mathrm{Sr}$ and 1110 Ma for $\mathrm{Sm}-\mathrm{Nd}$." ${ }^{61}$ If we run the Lead isotope ratios ${ }^{62}$ from the article through Microsoft Excel we get the following values respectively:

Pb 207/206 Age Dating Summary

| Age | Age |
| :---: | :---: |
| $\mathbf{4 , 9 3 3}$ | $\mathbf{4 , 9 2 8}$ |
| 4,961 | $\mathbf{4 , 9 5 6}$ |
| $\mathbf{4 , 9 5 2}$ | $\mathbf{4 , 9 4 7}$ |
| $\mathbf{4 , 9 5 2}$ | $\mathbf{4 , 9 5 7}$ |
| $\mathbf{4 , 9 4 2}$ | $\mathbf{4 , 9 2 7}$ |
| $\mathbf{4 , 9 7 8}$ | $\mathbf{4 , 9 5 2}$ |
| $\mathbf{4 , 9 4 0}$ | $\mathbf{4 , 9 5 4}$ |
| $\mathbf{4 , 9 4 7}$ |  |

Table 33

## Sr, Nd, and Os Isotope Geochemistry

According to the article ${ }^{63}$ this specimen [Camp Creek area, Arizona] was dated in 1987 by scientists from The University of Tennessee, the University of Michigan, the University of California, Leeds University, and the University of Chicago. According to the article ${ }^{64}$ the age of the samples is 120 million years. If we run the various isotope ratios ${ }^{65}$ from two different tables in the article through Microsoft Excel we get the following values respectively:

Rb/Sr and $\mathrm{Sm} / \mathbf{N d}$ Age Dating Summary

| Summary | 87Rb/86Sr | 87Rb/86Sr | 147Sm/144Nd | 147Sm/144Nd |
| :---: | :---: | :---: | :---: | :---: |
| Average | 310 | 103 | 120 | 159 |
| Maximum | 1,092 | 207 | 123 | 400 |
| Minimum | 0 | 0 | 120 | 119 |
| Difference | 1,092 | 207 | 3 | 281 |

Table 34
The author's choice of 120 million years is just a guess.

## Pb, Nd and Sr Isotopic Geochemistry

According to the article ${ }^{66}$ this specimen [Bellsbank kimberlite, South Africa] was dated in 1991 by scientists from the University Of Rochester, New York, Guiyang University in China, and the United States Geological Survey, Colorado. According to the article ${ }^{67}$ the age of the samples is just 1 million years. If we run the various isotope ratios ${ }^{68}$ from two different tables in the article through Microsoft Excel we get the following values respectively:

| Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Table | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 87Rb/86Sr |
| Summaries | Age | Age | Age | Age |
| Average | $\mathbf{5 , 0 5 7}$ | $\mathbf{5 , 0 9 2}$ | $\mathbf{1 0 , 1 8 2}$ | $\mathbf{- 1 , 5 0 2}$ |
| Maximum | $\mathbf{5 , 1 2 0}$ | $\mathbf{8 , 5 8 4}$ | $\mathbf{1 7 , 1 7 1}$ | $\mathbf{0}$ |
| Minimum | $\mathbf{5 , 0 0 2}$ | 0 | 0 | $\mathbf{- 3 , 5 9 3}$ |
| Difference | $\mathbf{1 1 8}$ | $\mathbf{8 , 5 8 4}$ | $\mathbf{1 7 , 1 7 1}$ | $\mathbf{3 , 5 9 3}$ |
| Table 35 |  |  |  |  |

In tables 36 to 39 we can see some of the astounding spread of dates [million of years]. The oldest date is over 17 billion years old. The youngest is less than negative 3.5 billion years. The difference between the two is over 20 billion years. According to the article the true age of the rock is just one million years old!

208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| 17,171 | 13,322 | 9,737 | $\mathbf{7 , 9 6 8}$ |
| 15,343 | 13,202 | 9,707 | $\mathbf{7 , 8 3 0}$ |
| 15,299 | 13,001 | $\mathbf{9 , 0 4 9}$ | $\mathbf{7 , 2 5 0}$ |
| 15,136 | 11,119 | $\mathbf{8 , 4 2 0}$ | $\mathbf{6 , 9 7 2}$ |
| 15,054 | 10,873 | $\mathbf{8 , 4 1 9}$ | $\mathbf{6 , 6 2 8}$ |
| 13,476 | 10,758 | $\mathbf{8 , 3 6 8}$ | $\mathbf{6 , 5 7 7}$ |

Table 36
$\underline{\underline{206 P b} / 238 U}$, Maximum Ages

| Age | Age | Age |
| :---: | :---: | :---: |
| $\mathbf{8 , 5 8 4}$ | $\mathbf{6 , 6 5 6}$ | $\mathbf{5 , 5 7 6}$ |
| $\mathbf{7 , 9 7 5}$ | $\mathbf{6 , 6 5 4}$ | $\mathbf{5 , 5 2 0}$ |
| $\mathbf{7 , 3 1 4}$ | $\mathbf{6 , 5 1 8}$ | $\mathbf{5 , 2 8 5}$ |
| $\mathbf{7 , 1 8 4}$ | $\mathbf{6 , 4 4 8}$ | $\mathbf{5 , 1 5 9}$ |
| $\mathbf{6 , 8 6 1}$ | $\mathbf{5 , 7 5 8}$ | $\mathbf{5 , 0 9 9}$ |
| Table 37 |  |  |

Pb 207/206, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 , 1 2 0}$ | $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 0}$ | $\mathbf{5 , 0 4 9}$ |
| $\mathbf{5 , 1 0 9}$ | $\mathbf{5 , 0 6 6}$ | $\mathbf{5 , 0 5 9}$ | $\mathbf{5 , 0 4 5}$ |
| $\mathbf{5 , 0 9 7}$ | $\mathbf{5 , 0 6 6}$ | $\mathbf{5 , 0 5 1}$ | $\mathbf{5 , 0 4 4}$ |
| $\mathbf{5 , 0 7 7}$ | $\mathbf{5 , 0 6 5}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 4 4}$ |
| $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 2}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 3 3}$ |
| $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 0}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 2 2}$ |

Table 38
87Rb/86Sr, Minimum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $-3,593$ | $-2,981$ | $-1,917$ | $-1,323$ |
| $-3,231$ | $-2,725$ | $-1,611$ | $-1,245$ |
| $-3,089$ | $-2,050$ | $-1,499$ | $-1,229$ |
| $-3,067$ | $-1,926$ | $-1,370$ | $-1,194$ |

Table 39

## $\mathrm{Sr}, \mathrm{Nd}$, and Pb isotopes

According to the article ${ }^{68}$ this specimen [eastern China] was dated in 1992 by scientists from the University Of Rochester, New York, Guiyang University in China, and the United States Geological Survey, Colorado. According to the article: "Observed high $\mathrm{Th} / \mathrm{U}, \mathrm{Rb} / \mathrm{Sr}, 87 \mathrm{Sr} / 86 \mathrm{Sr}$ and Delta 208 , low $\mathrm{Sm} / \mathrm{Nd}$ ratios, and a large negative Nd in phlogopite pyroxenite with a depleted mantle model age of 2.9 Ga , support our contention that metasomatized continental lower mantle lithosphere is the source for the EMI component." ${ }^{68}$ If we run the various isotope ratios ${ }^{69}$ from two different tables in the article through Isoplot we get the following values respectively:

| Age Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Dating | 232Th/208Pb | 206Pb/238U | 207Pb/206Pb |
| Summaries | Age | Age | Age |
| Average | 14,198 | 7,366 | 5,014 |
| Maximum | 94,396 | 22,201 | 5,077 |
| Minimum | 79 | 1,117 | 4,945 |
| Difference | 94,317 | 21,083 | 131 |
| Table 40 |  |  |  |

If the true age is 2.9 billion years why so much discordance? In tables 41 to 43 we can see some of the astounding spread of dates [million of years]. The oldest date is over 94 billion years old. The youngest is 79 million years. The difference between the two is over 94 billion years. The oldest date is 1,194 times older than the youngest. According to the article the true age of the rock is 2.9 billion years old!

208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{9 4 , 3 9 6}$ | $\mathbf{3 9 , 2 6 7}$ | $\mathbf{1 0 , 5 9 5}$ | $\mathbf{8 , 1 7 1}$ |
| $\mathbf{9 0 , 6 8 3}$ | $\mathbf{2 6 , 2 6 6}$ | $\mathbf{1 0 , 2 8 4}$ | $\mathbf{7 , 7 8 9}$ |
| $\mathbf{7 4 , 6 3 9}$ | $\mathbf{1 8 , 3 3 4}$ | $\mathbf{9 , 3 2 8}$ | $\mathbf{7 , 6 3 8}$ |
| $\mathbf{5 8 , 1 5 3}$ | $\mathbf{1 6 , 3 5 7}$ | $\mathbf{8 , 8 2 1}$ | $\mathbf{7 , 3 7 5}$ |
| $\mathbf{5 5 , 3 2 4}$ | $\mathbf{1 4 , 2 5 0}$ | $\mathbf{8 , 7 7 1}$ | $\mathbf{7 , 3 1 7}$ |
| $\mathbf{4 5 , 2 4 2}$ | $\mathbf{1 1 , 2 1 5}$ | $\mathbf{8 , 4 0 3}$ | $\mathbf{5 , 7 5 9}$ |

Table 41
206Pb/238U, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 2 , 2 0 1}$ | $\mathbf{9 , 8 7 8}$ | $\mathbf{7 , 3 4 8}$ | $\mathbf{5 , 7 4 6}$ |
| $\mathbf{2 1 , 8 1 3}$ | $\mathbf{9 , 6 5 6}$ | $\mathbf{7 , 3 3 5}$ | $\mathbf{5 , 7 0 0}$ |
| $\mathbf{1 9 , 3 2 0}$ | $\mathbf{9 , 0 5 4}$ | $\mathbf{7 , 2 4 9}$ | $\mathbf{5 , 2 1 8}$ |
| $\mathbf{1 6 , 6 5 6}$ | $\mathbf{8 , 2 4 2}$ | $\mathbf{7 , 2 0 2}$ | $\mathbf{5 , 2 0 1}$ |
| $\mathbf{1 6 , 2 0 0}$ | $\mathbf{8 , 0 4 4}$ | $\mathbf{7 , 0 1 9}$ | $\mathbf{5 , 1 6 3}$ |
| $\mathbf{1 4 , 7 4 8}$ | $\mathbf{7 , 9 9 6}$ | $\mathbf{6 , 9 2 3}$ | $\mathbf{5 , 1 5 9}$ |
| $\mathbf{1 3 , 6 0 7}$ | $\mathbf{7 , 5 9 0}$ | $\mathbf{6 , 8 4 8}$ | $\mathbf{5 , 0 9 9}$ |
| $\mathbf{1 1 , 2 5 6}$ | $\mathbf{7 , 4 2 2}$ | $\mathbf{6 , 2 9 2}$ | $\mathbf{4 , 8 1 2}$ |

## Table 42

## Production of Jurassic Rhyolite

According to the article ${ }^{70}$ this specimen [Patagonia, South America] was dated in 1994 by scientists from the British Antarctic Survey, National University, Argentina. According to the article: "Primary magmas of andesitic composition were generated by partial melting of mafic" Grenvillian" lower crust, indentified by depleted-mantle model ages of 1150$1600 \mathrm{Ma} .{ }^{"}{ }^{70}$ If we run the various isotope ratios ${ }^{71}$ from two different tables in the article through Microsoft Excel we get the following values respectively:

| $\mathbf{R b} / \mathbf{S r}$ Age Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{4 3 2}$ |
| Maximum | $\mathbf{1 7 , 3 8 7}$ |
| Minimum | $\mathbf{- 4 , 6 3 3}$ |
| Difference | $\mathbf{2 2 , 0 2 0}$ |

Table 43

## Evolution of Reunion Hotspot Mantle

According to the article ${ }^{72}$ this specimen [Reunion and Mauritius Islands] was dated in 1995 by scientists from the University of Hawaii. According to the article: "Whole-rock powder obtained from P. Krishnamurthy. (87Sr/86 Sr), and $\mathrm{em}(\mathrm{T})$ are age-corrected values; $T=66 \mathrm{Ma}$ for the drill hole lavas." ${ }^{73}$ If we run the various isotope ratios ${ }^{74}$ from two different tables in the article through Isoplot we get the following values respectively:

| Age Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Table | 232Th/208Pb | 206Pb/238U | 207Pb/206Pb |
| Summaries | Age | Age | Age |
| Average | $\mathbf{8 , 0 7 9}$ | $\mathbf{4 , 4 4 9}$ | $\mathbf{4 , 9 7 6}$ |
| Maximum | $\mathbf{1 3 , 2 8 7}$ | $\mathbf{6 , 2 8 5}$ | $\mathbf{5 , 0 1 6}$ |
| Minimum | $\mathbf{5 , 6 4 1}$ | $\mathbf{3 , 0 1 0}$ | $\mathbf{4 , 9 5 3}$ |
| Difference | $\mathbf{7 , 6 4 6}$ | $\mathbf{3 , 2 7 6}$ | $\mathbf{6 3}$ |
| Table 44 |  |  |  |

Table 44
$\underline{\text { 208Pb/232Th, Maximum Ages }}$

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| 13,287 | $\mathbf{8 , 7 2 5}$ | $\mathbf{7 , 3 6 3}$ | $\mathbf{6 , 5 4 0}$ |
| 11,832 | $\mathbf{8 , 6 0 9}$ | 7,362 | $\mathbf{6 , 4 7 9}$ |
| 11,017 | $\mathbf{7 , 5 4 1}$ | $\mathbf{7 , 0 8 0}$ | $\mathbf{6 , 3 2 3}$ |
| 10,357 | 7,517 | $\mathbf{7 , 0 1 7}$ | $\mathbf{5 , 6 6 0}$ |
| 9,101 | $\mathbf{7 , 4 4 6}$ | $\mathbf{6 , 6 7 9}$ | $\mathbf{5 , 6 4 1}$ |

Table 45
206Pb/238U, Maximum Ages

| 206Pb/238U, Maximum Ages |  |  |  |
| :---: | :---: | :---: | :---: |
| Age | Age | Age | Age |
| $\mathbf{6 , 2 8 5}$ | $\mathbf{4 , 9 0 3}$ | $\mathbf{4 , 1 4 1}$ | $\mathbf{3 , 8 7 5}$ |
| $\mathbf{6 , 1 6 5}$ | $\mathbf{4 , 6 3 3}$ | $\mathbf{4 , 1 3 3}$ | $\mathbf{3 , 6 4 7}$ |
| $\mathbf{5 , 7 6 7}$ | $\mathbf{4 , 3 4 2}$ | $\mathbf{4 , 0 1 1}$ | $\mathbf{3 , 5 4 8}$ |
| $\mathbf{5 , 5 5 3}$ | $\mathbf{4 , 2 5 8}$ | $\mathbf{4 , 0 0 1}$ | $\mathbf{3 , 3 6 9}$ |
| $\mathbf{5 , 1 5 2}$ | $\mathbf{4 , 2 2 0}$ | $\mathbf{3 , 9 7 3}$ | $\mathbf{3 , 0 1 0}$ |

Table 46

According to dating charts in the article, the true age is just 66 million years old! ${ }^{74}$

## An Extremely Low U/Pb Source

According to the article ${ }^{75}$ this specimen [lunar meteorite] was dated in 1993 by scientists from the United States Geological Survey, Colorado, the United States Geological Survey, California and The National Institute of Polar Research, Tokyo. According to the article: "The $\mathrm{Pb}-\mathrm{Pb}$ internal isochron obtained for acid leached residues of separated mineral fractions yields an age of $3940 \pm 28 \mathrm{Ma}$, which is similar to the $\mathrm{U}-\mathrm{Pb}(3850 \pm 150 \mathrm{Ma})$ and $\mathrm{Th}-\mathrm{Pb}(3820 \pm 290$ Ma ) internal isochron ages. The $\mathrm{Sm}-\mathrm{Nd}$ data for the mineral separates yield an internal isochron age of $3871 \pm 57 \mathrm{Ma}$ and an initial $143 \mathrm{Nd} /\left[44 \mathrm{Nd}\right.$ value of $0.50797 \pm 10$. The Rb-Sr data yield an internal isochron age of $3840 \pm 32 \mathrm{Ma}$." ${ }^{75}$
$\mathbf{R b} / \mathbf{S r}$ Age Dating Summary

| Average | $\mathbf{3 , 6 1 9}$ |
| :---: | :---: |
| Maximum | $\mathbf{5 , 3 8 5}$ |
| Minimum | $\mathbf{7 2 1}$ |
| Difference | $\mathbf{4 , 6 6 4}$ |

Table 47

| Uranium Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Table | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 207Pb/235U |
| Summaries | Age | Age | Age | Age |
| Average | 4,673 | $\mathbf{8 , 0 3 5}$ | $\mathbf{1 0 , 1 4 8}$ | 4,546 |
| Maximum | $\mathbf{5 , 0 1 8}$ | $\mathbf{5 6 , 9 2 3}$ | $\mathbf{6 5 , 2 8 6}$ | $\mathbf{8 , 1 2 8}$ |
| Minimum | $\mathbf{3 , 9 6 1}$ | $\mathbf{1 , 4 7 7}$ | $\mathbf{2 , 5 4 2}$ | $\mathbf{2 , 7 8 4}$ |
| Difference | $\mathbf{1 , 0 5 7}$ | $\mathbf{5 5 , 4 4 5}$ | $\mathbf{6 2 , 7 4 4}$ | $\mathbf{5 , 3 4 4}$ |

Table 48
The article claims that the $\mathrm{Rb} / \mathrm{Sr}$ age is 3.8 billion years for this meteorite. If that is the true age why are all the Uranium/Thorium/Lead dates ${ }^{76}$ so stupid? Or are they right and the $\mathrm{Rb} / \mathrm{Sr}$ is wrong?
208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{6 5 , 2 8 6}$ | $\mathbf{1 4 , 4 3 0}$ | $\mathbf{9 , 0 9 4}$ | $\mathbf{5 , 4 0 1}$ |
| $\mathbf{3 3 , 8 9 8}$ | $\mathbf{1 4 , 4 1 0}$ | $\mathbf{6 , 5 2 0}$ | $\mathbf{5 , 3 9 6}$ |
| 25,013 | $\mathbf{1 3 , 1 0 7}$ | $\mathbf{6 , 1 6 6}$ | $\mathbf{5 , 3 6 5}$ |
| $\mathbf{2 2 , 1 7 8}$ | $\mathbf{1 2 , 7 3 8}$ | $\mathbf{6 , 1 2 1}$ | $\mathbf{5 , 0 9 8}$ |
| 21,204 | $\mathbf{1 1 , 6 4 1}$ | $\mathbf{5 , 6 7 1}$ | $\mathbf{5 , 0 3 5}$ |
| $\mathbf{1 7 , 6 1 1}$ | $\mathbf{1 1 , 1 7 4}$ | $\mathbf{5 , 4 0 8}$ | $\mathbf{4 , 6 7 8}$ |

Table 49
206Pb/238U, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 6 , 9 2 3}$ | $\mathbf{1 0 , 8 9 5}$ | $\mathbf{6 , 7 6 4}$ | $\mathbf{5 , 7 7 7}$ |
| 27,313 | $\mathbf{1 0 , 2 7 8}$ | $\mathbf{6 , 6 7 0}$ | $\mathbf{5 , 6 2 5}$ |
| 17,873 | $\mathbf{9 , 6 5 3}$ | $\mathbf{6 , 4 4 9}$ | $\mathbf{5 , 6 0 2}$ |
| 13,680 | $\mathbf{8 , 0 0 9}$ | $\mathbf{6 , 4 3 6}$ | $\mathbf{5 , 2 7 8}$ |
| 13,623 | $\mathbf{7 , 3 9 5}$ | $\mathbf{6 , 0 7 0}$ | $\mathbf{5 , 1 4 7}$ |

Table 50

## The 72 Ma Geochemical Evolution

According to the article ${ }^{77}$ this specimen [Madeira Archipelago] was dated in 2000 by scientists from Germany. The average Lead date is 705 times older than the average Rubidium date. The true age is claimed to be 430 million years old.
${ }^{77}$ If we run the various isotope ratios ${ }^{78}$ from two different tables in the article through Isoplot we get the following values respectively:

Age Dating Summary

| Table | 207Pb/206Pb | 87Rb/86Sr | 147Sm/144Nd |
| :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age |
| Average | 4,938 | 7 | 10 |
| Maximum | 5,199 | 55 | $\mathbf{1 6 4}$ |
| Minimum | 4,898 | -4 | 0 |
| Difference | $\mathbf{3 0 2}$ | 59 | $\mathbf{1 6 4}$ |

Table 51
If the true age is 430 million years than none of the dating methods are even vaguely close. The oldest date is 731 times older than the youngest.

## The Himalayan Collision Zone

According to the article ${ }^{79}$ this specimen [East Tibet] was dated in 2000 by scientists from Germany. As far as the age goes the author states: "Partial melting of the mantle source was most likely triggered by a Cenozoic asthenospheric mantle diapir related to Indian-Asian continent collision at $65-45 \mathrm{Ma}$. Rising and emplacement of carbonatitic magmas with coeval potassium-rich magmas took place in the tectonic regime of the transition from transpression to transtension at Eocene/Oligocene boundary in the EIACZ." ${ }^{80}$ He also states: "The initial "Nd values and $87 \mathrm{Sr} / 86 \mathrm{Sr}$ ratios were calculated at $t=35 \mathrm{Ma} .{ }^{081}$ If we run the various isotope ratios ${ }^{82}$ from two different tables in the article through Isoplot we get the following values respectively:

Pb 207/206, Dating Summary

| Dating | 207Pb/206Pb | 87Rb/86Sr |
| :---: | :---: | :---: |
| Summary | Age | Age |
| Average | $\mathbf{5 , 0 1 5}$ | 0 |
| Maximum | 5,023 | 0 |
| Minimum | 4,976 | 0 |
| Difference | 47 | 0 |
| Table 52 |  |  |

If the specimen is of the Eocene era [Less than 100 million years old] how can the Lead/Lead dating produce such rubbish? If we run the $\mathrm{Rb} / \mathrm{Sr}$ ratios through Microsoft Excel we get zero ages!

## Evidence for a Non Magmatic component

According to the article ${ }^{83}$ this specimen [Yukon, Canada] was dated in 2001 by Canadian scientists from the University of Alberta, and Dalhousie University, Halifax. According to Argon dating the age of the material is 70 million years. ${ }^{84}$ If we run the various isotope ratios ${ }^{85}$ from two different tables in the article through Isoplot we get the following values respectively:

| Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Table | 207Pb/206Pb | 87Rb/86Sr |
| Summaries | Age | Age |
| Average | $\mathbf{4 , 9 5 5}$ | 71 |
| Maximum | $\mathbf{5 , 2 1 4}$ | 101 |
| Minimum | $\mathbf{4 , 9 1 8}$ | $\mathbf{6 0}$ |
| Difference | 296 | 41 |
| Table 53 |  |  |

If we look at the average ages we see that there is a 7 thousand percent difference between them! If we compare the youngest and oldest dates we see that there is an 8,540 percent difference between them.

## The Origin Of Geochemical Diversity

According to the article ${ }^{86}$ this specimen [lunar basalt] was dated in 2007 by scientists from New Mexico University. According to $\mathrm{Rb} / \mathrm{Sr}$ isochron diagram the age of the material is 3.678 billion years. ${ }^{87}$ If we run the various isotope ratios ${ }^{88}$ from two different tables in the article through Isoplot we get the following values respectively:

Age Dating Summary

| Table | 207Pb/206Pb | 206Pb/238U | 87Rb/86Sr |
| :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age |
| Average | $\mathbf{4 , 6 3 5}$ | $\mathbf{6 , 5 6 5}$ | $\mathbf{4 , 6 7 2}$ |
| Maximum | $\mathbf{5 , 1 1 1}$ | $\mathbf{1 8 , 2 1 3}$ | $\mathbf{7 , 0 9 4}$ |
| Minimum | $\mathbf{4 , 0 2 8}$ | $\mathbf{3 , 7 0 6}$ | $\mathbf{3 , 4 7 6}$ |
| Difference | $\mathbf{1 , 0 8 2}$ | $\mathbf{1 4 , 5 0 6}$ | $\mathbf{3 , 6 1 8}$ |

## Table 54

The dating methods all disagree with each other. There is a wide spread of dates which are just random.

## Mechanisms For Incompatible-Element Enrichment

According to the article ${ }^{89}$ this specimen [meteorite Northwest Africa] was dated in 2009 by scientists from Lawrence Livermore National Laboratory, University of New Mexico, the University of California, Berkeley, and Arizona State University. The author states: "Rubidium-Strontium isotopic analyses yield an age of $2,947 \pm 16 \mathrm{Ma}$ " If we run the various isotope ratios ${ }^{90}$ from a table in the article through Microsoft Excel we get the following values respectively:

Rb/Sr Age Dating Summary

| Average | $\mathbf{5 , 4 8 3}$ |
| :---: | :---: |
| Maximum | $\mathbf{1 3 , 4 9 7}$ |
| Minimum | $\mathbf{1 , 9 1 7}$ |
| Difference | $\mathbf{1 1 , 5 7 9}$ |

Table 55
Out of the eleven isotope ratios, two returned dates over ten billion years old.

## Constraints On Martian Differentiation Processes

According to the article ${ }^{91}$ this specimen [Martian meteorite] was dated in 1997 by scientists from the NASA Johnson Space Centre, Houston, Texas, the University of Tennessee, and Lockheed Martin, Houston, Texas. According to the article ${ }^{91}$ the age range is: "The neodymium isotopic systematics of QUE 94201 are not consistent with significant melting between 4.525 Ga and 327 Ma ." If we run the various isotope ratios ${ }^{92}$ from two different tables [1 and 4] in the article through Microsoft Excel we get the following values respectively:

| Rb/Sr Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Summary | Table 1 | Table 4 |
| Average | 618 | $-34,834$ |
| Maximum | 1,765 | 4,642 |
| Minimum | -98 | $-118,922$ |
| Difference | $\mathbf{1 , 6 6 8}$ | 123,564 |

Table 56
Instead of having a 4.2 billion year spread we have a 123 billion year spread of dates. Both tables in the article give dates way off the so called true age.

## Geochemistry of the Volcan de l'Androy

According to the article ${ }^{93}$ this specimen from the Androy massif in south eastern Madagascar was dated in 2008 by scientists from the University Of Hawaii. According to the article Argon and Rubidium dating defined the so called true ages as: "The R2 rhyolites define a whole-rock $\mathrm{Rb} / \mathrm{Sr}$ isochron of 84 Ma , the same, within error, as an $40 \mathrm{Ar} / 39 \mathrm{Ar}$ sanidine age reported by earlier workers." ${ }^{93}$ If we run the various isotope ratios ${ }^{94}$ from a table in the article through Isoplot we get the following values respectively:

Pb 207/206, Dating Summary

| Average | $\mathbf{5 , 0 0 4}$ | $\mathbf{4 , 9 9 9}$ |
| :---: | :---: | :---: |
| Maximum | $\mathbf{5 , 0 4 8}$ | $\mathbf{5 , 0 2 9}$ |
| Minimum | $\mathbf{4 , 9 8 0}$ | $\mathbf{4 , 9 8 4}$ |
| Difference | $\mathbf{6 7}$ | $\mathbf{1 8}$ |
| Table 57 |  |  |

The Lead dating give ages that are sixty times older than the $\mathrm{Rb} / \mathrm{Sr}$ dates.

## Continental Lithospheric Contribution

According to the article ${ }^{95}$ this specimen from southern Portugal was dated in 1997 by scientists from France. According to the article Argon and Rubidium dating defined the so called true ages as: "The age of the intrusion and crystallization of the alkaline rocks of the Serra de Monchique is 72 Ma , based on $\mathrm{Rb} / \mathrm{Sr}$ and $\mathrm{K} / \mathrm{Ar}$ dating." ${ }^{96}$ If we run the various isotope ratios ${ }^{97}$ from a table in the article through Isoplot we get the following values respectively:

Age Dating Summary

| Table | 207Pb/206Pb | 208Pb/232Th | 206Pb/238U | 87Rb/86Sr |
| :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age |
| Average | 4,920 | 6,126 | 4,539 | $\mathbf{- 6 2}$ |
| Maximum | 4,949 | 10,084 | 7,723 | $\mathbf{- 5 0}$ |
| Minimum | 4,894 | 2,616 | 2,306 | $-\mathbf{- 7 5}$ |
| Difference | 55 | 7,467 | 5,417 | 25 |
| Table 58 |  |  |  |  |

The date of 72 million years is just a guess. The Thorium/Lead method gives dates 140 times older. The Uranium/Lead methods give dates 107 times older. Below we can see the maximum ages [million years] calculated form isotope ratios. Compare these with the so called true age!

| Maximum Ages |  |
| :---: | :---: |
| $208 \mathrm{~Pb} / 232 \mathrm{Th}$ | 206Pb/238U |
| 10,084 | 7,723 |
| 9,320 | 7,060 |
| 8,101 | 6,507 |
| 7,502 | 6,387 |
| 7,080 | 6,206 |
| 6,891 | 5,143 |
| 6,655 | 4,734 |
| 6,313 | 4,186 |
| 5,830 | 3,768 |
| 5,755 | 3,761 |
| 5,029 | 3,487 |
| Table 59 |  |

## Garnet Granulite Xenoliths

According to the article ${ }^{98}$ this specimen from the northern Baltic shield was dated in 2001 by scientists from England, USA and Russia. According to the article Argon dating defined the so called true ages as 400 to 2200 million years. ${ }^{99}$ If we run the various isotope ratios ${ }^{\mathbf{1 0 0}}$ from table 4 in the article through Isoplot we get the following values respectively:

| Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Table | 206Pb/238U | 207Pb/206Pb |
| Summaries | Age | Age |
| Average | $\mathbf{1 7 , 0 0 2}$ | $\mathbf{5 , 0 4 6}$ |
| Maximum | $\mathbf{4 0 , 0 5 9}$ | $\mathbf{5 , 2 9 5}$ |
| Minimum | $\mathbf{1 , 6 0 8}$ | $\mathbf{3 , 9 0 8}$ |
| Difference | $\mathbf{3 8 , 4 5 2}$ | $\mathbf{1 , 3 8 7}$ |
| Table 60 |  |  |

Below are the maximum ages calculated from isotope ratios in tables 4 and 5 in the article:

| 206Pb/238U | 206Pb/238U |  | 206Pb/238U |  | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Age |  | Age |  | Age |
| 40,059 | 28,118 |  | 21,092 |  | 13,724 |
| 35,742 | 27,127 |  | 16,026 |  | 13,404 |
| 34,459 | 25,884 |  | 14,371 |  | 12,747 |
| 33,978 | 21,209 |  | 14,272 |  | 10,956 |
| Table 61 |  |  |  |  |  |
| 206Pb/238U, Maximum Ages |  |  |  |  |  |
| 206Pb/238U |  | 206Pb/238U |  | 206Pb/238U |  |
| Age |  | Age |  | Age |  |
| 20,648 |  | 13,724 |  | 10,956 | 956 |
| 17,527 |  | 13,404 |  | 10,049 | 049 |
| 16,336 |  | 12,622 |  | 6,792 | 92 |
| 15,626 |  | 12,165 |  | 6,265 | 65 |
| 15,018 |  | 11,432 |  | 5,865 | 86 |
| Table 62 |  |  |  |  |  |

If we run more ratios form and online supplement we get ages uniformly 5 billion years old. Compare these with the so called true age!

## The Isotope and Trace Element Budget

According to the article ${ }^{102}$ this specimen from the Devil River Arc System, New Zealand was dated in 2000 by scientists from Germany. According to the article, the so called true ages is Cambrian. ${ }^{102}$ If we run the various isotope ratios ${ }^{103}$ from table 4 in the article through Isoplot we get the following values respectively:

Age Dating Summary

| Age Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Table | 207Pb/206Pb | 206Pb/238U | 87Rb/86Sr |
| Summaries | Age | Age | Age |
| Average | $\mathbf{4 , 9 7 0}$ | $\mathbf{1 9 , 1 4 3}$ | 500 |
| Maximum | $\mathbf{4 , 9 8 6}$ | 21,761 | 501 |
| Minimum | $\mathbf{4 , 9 3 2}$ | $\mathbf{1 5 , 1 5 0}$ | $\mathbf{4 9 5}$ |
| Difference | $\mathbf{5 4}$ | $\mathbf{6 , 6 1 1}$ | $\mathbf{6}$ |

## Table 63

The Lead/Lead dates are ten times too old and the Uranium/Lead dates are 40 times too old!

## Fluid Flow and Diffusion

According to the article ${ }^{\mathbf{1 0 4}}$ this specimen from the Waterville Formation in south-central Maine, USA, was dated in 1997 by scientists from England and USA. According to the article, the so called true age is: "the $376 \pm 6 \mathrm{Ma} \mathrm{Rb}-\mathrm{Sr}$ whole-rock age of the syn-metamorphic Hallowell pluton." ${ }^{104}$ According to isochron diagrams in the article ${ }^{105}$ the model age is between 342 to 391 million years. The article has an age range diagram ${ }^{106}$ which claims that the maximum age is 425 million years. If we run the various isotope ratios ${ }^{107}$ from table 4 in the article through Isoplot we get the following values respectively:

| Rb/Sr Age Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{7 4 6}$ |
| Maximum | 2,063 |
| Minimum | 316 |
| Difference | 1,747 |
| Table 64 |  |

Out of the 150 isotopic ratios in the essay, 134 gave ages greater than the so called maximum age limit. Twenty six gave ages that were more than twice the maximum limit.

## Temporal Evolution of the Lithospheric Mantle

According to the article ${ }^{\mathbf{1 0 8}}$ this specimen from the Eastern North China Craton was dated in 2009 by scientists from China, USA and Australia. Various tables ${ }^{109}$ in the essay have either calculated dates or ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates over a 32 billion year range.

Age Dating Summary

| Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Table | 147Sm/144Nd | 176Lu/176Hf | 187Re/188Os | 87Rb/86Sr |
| Summaries | Age | Age | Age | Age |
| Average | 291 | -220 | 1,048 | 9 |
| Maximum | $\mathbf{3 , 0 7 9}$ | $\mathbf{4 , 1 9 2}$ | 20,710 | 22 |
| Minimum | $-3,742$ | $-9,369$ | $-11,060$ | 0 |
| Difference | 6,821 | 13,561 | 31,770 | 22 |

Table 65

## Petrogenesis and Origins of Mid-Cretaceous

According to the article ${ }^{\mathbf{1 1 0}}$ this specimen from the Intraplate Volcanism in Marlborough, New Zealand was dated in 2010 by scientists from New Zealand. According to the essay: "the intraplate basalts in New Zealand that have been erupted intermittently over the last c. $100 \mathrm{Myr}{ }^{1111}$ Various tables ${ }^{112}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates over a 10 billion year range. None of the Lead based dating methods even come vaguely close to a Cretaceous age.

Age Dating Summary

| Table | 207Pb/206Pb | 207Pb/235U | 87Rb/86Sr | 208Pb/232Th | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age | Age |
| Average | $\mathbf{4 , 8 7 6}$ | $\mathbf{4 , 4 1 6}$ | 59 | $\mathbf{6 , 3 3 3}$ | $\mathbf{3 , 5 1 5}$ |
| Maximum | $\mathbf{4 , 9 4 5}$ | $\mathbf{5 , 1 5 9}$ | $\mathbf{8 5}$ | $\mathbf{1 0 , 7 1 6}$ | $\mathbf{5 , 7 1 7}$ |
| Minimum | $\mathbf{4 , 8 3 6}$ | $\mathbf{4 , 0 8 8}$ | $\mathbf{1 5}$ | $\mathbf{4 , 7 8 5}$ | $\mathbf{2 , 7 1 2}$ |
| Difference | $\mathbf{1 0 9}$ | $\mathbf{1 , 0 7 1}$ | $\mathbf{7 0}$ | $\mathbf{5 , 9 3 1}$ | $\mathbf{3 , 0 0 5}$ |

Table 66

## The Petrogenetic Association of Carbonatite

According to the article ${ }^{113}$ this specimen from the Spitskop Complex, South Africa was dated in 1999 by scientists from South Africa. According to the essay: "The 1,341 Ma old Spitskop Complex in South Africa is one of a series of intrusions of alkaline affinity." ${ }^{113}$ Various tables ${ }^{114}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other.

| Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Dating | 87Rb/86Sr | 207Pb/206Pb |
| Summary | Age | Age |
| Average | $\mathbf{- 6 , 0 1 2}$ | $\mathbf{5 , 0 5 6}$ |
| Maximum | $\mathbf{2 , 7 6 2}$ | 5,126 |
| Minimum | $-\mathbf{6 6 , 4 9 9}$ | $\mathbf{4 , 6 4 9}$ |
| Difference | $\mathbf{6 9 , 2 6 2}$ | 477 |
| Table 67 |  |  |

Nine of the twenty six $\mathrm{Rb} / \mathrm{Sr}$ dates are over three billion years in error. Seven are over eleven billion years in error. The thirteen Lead 206/207 dates are all totally way off.

## Geochemistry Of The Jurassic Oceanic Crust

According to the article ${ }^{15}$ this specimen from the Canary Islands was dated in 1998 by scientists from Germany. According to the essay: "An Sm-Nd isochron gives an age of $178 \pm 17 \mathrm{Ma}$, which agrees with the age predicted from paleomagnetic data. ${ }^{1115}$ The article places the age in the late Cretaceous period. Various tables ${ }^{116}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates over a 350 billion year range! None of the Lead or Rubidium based dating methods even come vaguely close to a Jurassic age.

| Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Dating | 87Rb/86Sr | 207Pb/206Pb |
| Summary | Age | Age |
| Average | $\mathbf{- 1 4 9 , 4 8 8}$ | $\mathbf{4 , 9 7 4}$ |
| Maximum | $\mathbf{5 1 , 9 6 7}$ | $\mathbf{5 , 0 2 4}$ |
| Minimum | $\mathbf{- 2 9 9 , 3 4 6}$ | $\mathbf{4 , 8 4 5}$ |
| Difference | $\mathbf{3 5 1 , 3 1 3}$ | $\mathbf{1 7 9}$ |
| Table 68 |  |  |

## The Age Of Dar Al Gani 476

According to the article ${ }^{117}$ this Martian meteorite was dated in 2003 by scientists from the University of New Mexico, NASA Johnson Space Centre, Lockheed Engineering and Science Company. According to the essay: "In either case, the fact that the Martian meteorites define a whole rock $\mathrm{Rb}-\mathrm{Sr}$ isochron with an age of 4.5 Ga require these reservoirs to have formed near the time of planet formation." ${ }^{117}$ A table ${ }^{118}$ in the essay has isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with the assumed age. There is a spread of dates of almost 18 billion year range! None of the Rubidium based dating methods even come vaguely close to the so called true age.

Rb/Sr Age Dating Summary

| Average | $\mathbf{- 9 , 3 9 8}$ |
| :---: | :---: |
| Maximum | $\mathbf{- 2 , 1 4 2}$ |
| Minimum | $\mathbf{- 2 0 , 0 0 4}$ |
| Difference | $\mathbf{1 7 , 8 6 2}$ |

Table 69

## Petrogenesis Of The Flood Basalts

According to the article ${ }^{119}$ this basalt form the Northern Kerguelen Archipelago was dated in 1998 by scientists from the Massachusetts Institute Of Technology, University of Brussels, Belgium and the San Diego State University. According to the essay: "The dominance of this isotopic signature in archipelago lavas for 30 my and its presence in $\sim 40 \mathrm{Ma}$ gabbros is consistent with the previous interpretation that these are isotopic characteristics of the Kerguelen Plume." 119 Various tables ${ }^{\mathbf{1 2 0}}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong
disagreement with each other. There is a spread of dates of over a 44 billion year range! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

Age Dating Summary

| Mt Rabouillere | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ | $\mathbf{2 0 7 P b} / \mathbf{2 0 6 P b}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 235 \mathrm{U}$ | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ |
| Average | $\mathbf{2 1}$ | $\mathbf{5 , 0 0 8}$ | $\mathbf{4 , 9 0 3}$ | $\mathbf{4 , 9 7 5}$ | $\mathbf{6 , 1 4 2}$ |
| Maximum | $\mathbf{3 0}$ | $\mathbf{5 , 0 1 9}$ | $\mathbf{5 , 3 5 5}$ | $\mathbf{5 , 1 0 0}$ | $\mathbf{7 , 7 8 8}$ |
| Minimum | -7 | $\mathbf{5 , 0 0 0}$ | $\mathbf{4 , 3 0 5}$ | $\mathbf{4 , 7 9 3}$ | $\mathbf{2 , 7 9 9}$ |
| Difference | $\mathbf{3 8}$ | $\mathbf{2 0}$ | $\mathbf{1 , 0 5 0}$ | $\mathbf{3 0 7}$ | $\mathbf{4 , 9 8 9}$ |

Table 70
Age Dating Summary

| Mount Bureau <br> Summary | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 87Rb/86Sr | 207Pb/206Pb | 206Pb/238U | 207Pb/235U | 208Pb/232Th |
| Average | 27 | 5,006 | 5,924 | 5,161 | $\mathbf{8 , 4 1 0}$ |
| Maximum | 30 | 5,020 | 23,366 | $\mathbf{8 , 4 9 6}$ | 44,378 |
| Minimum | 24 | 4,994 | 3,335 | 4,454 | $\mathbf{2 , 6 5 0}$ |
| Difference | 6 | 26 | $\mathbf{2 0 , 0 3 1}$ | $\mathbf{4 , 0 4 2}$ | $\mathbf{4 1 , 7 2 8}$ |

Table 71

## Nature Of The Source Regions

According to the article ${ }^{\mathbf{1 2 1}}$ this lava from southern Tibet was dated in 2004 by scientists from the Open University in Milton Keynes, the University of Bristol and Cardiff University. According to the essay: "Most samples are Miocene in age, ranging from 10 to 25 Ma in the south and 19Ma to the present day in northern Tibet" ${ }^{122}$ Various tables ${ }^{123}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates of over a 88 billion year range! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

Age Dating Summary

| Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| North Tibet | 208Pb/232Th | $\mathbf{2 0 7 P b} / 235 \mathrm{U}$ | 207Pb/206Pb | 206Pb/238U |
| Summary | Million Years | Million Years | Million Years | Million Years |
|  | 11,420 | $\mathbf{5 , 1 3 6}$ | $4,980$ | 7,783 |
| 87Rb/86Sr | 11,350 | 5,138 | 4,980 | 8,023 |
| Model Age | 13,475 | $5,135$ | 4,987 | 8,305 |
| 13 Million Years | $11,504$ | $5,140$ | 4,989 | 7,349 |
|  | $\mathbf{8 1 , 6 1 4}$ | 7,470 | 4,987 | 33,751 |
|  | 88,294 | 7,471 | 4,991 | 33,742 |

Table 72

| Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 208Pb/232Th | 207Pb/235U | 207Pb/206Pb | 206Pb/238U |
|  | Million Years | Million Years | Million Years | Million Years |
|  | $\mathbf{1 1 , 1 0 2}$ | $\mathbf{3 1 3}$ | $\mathbf{4 , 9 8 2}$ | $\mathbf{6 , 3 3 1}$ |
|  | $\mathbf{6 , 0 9 2}$ | $\mathbf{9 4 6}$ | $\mathbf{4 , 9 1 9}$ | $\mathbf{5 , 7 9 9}$ |
| 87Rb/86Sr | $\mathbf{9 , 2 6 5}$ | $\mathbf{2 6 6}$ | $\mathbf{4 , 9 8 0}$ | $\mathbf{6 , 6 8 2}$ |
| Model Age | $\mathbf{4 , 8 2 6}$ | 238 | $\mathbf{4 , 9 9 2}$ | $\mathbf{4 , 0 8 6}$ |
| 13 Million Years | $\mathbf{8 , 2 0 5}$ | 294 | $\mathbf{4 , 9 8 0}$ | $\mathbf{5 , 5 6 7}$ |
|  | $\mathbf{2 5 , 0 1 5}$ | 447 | $\mathbf{4 , 9 9 4}$ | $\mathbf{1 3 , 3 2 8}$ |
|  | $\mathbf{3 3 , 1 9 1}$ | 482 | $\mathbf{4 , 9 9 2}$ | $\mathbf{1 5 , 0 5 3}$ |

Table 73

## Generation Of Palaeocene Adakitic Andesites

According to the article ${ }^{124}$ this rock formation from North Eastern China was dated in 2007 by scientists from China and Japan. According to the essay the true age is: "Palaeocene (c. $55-58 \mathrm{Ma}$ ) adakitic andesites from the Yanji area." ${ }^{\mathbf{1 2 4}}$ Numerous table and charts affirm this as the true age. ${ }^{125} \mathrm{~A}$ table ${ }^{126}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of over 10 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

| Age Dating Summary |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dating | 87Rb/86Sr | 207Pb/206Pb | 208Pb/232Th | 206Pb/238U | 207Pb/235U |  |
| Summary | Age | Age | Age | Age | Age |  |
| Average | 51 | 5,022 | $\mathbf{8 , 9 4 1}$ | $\mathbf{8 , 7 5 4}$ | $\mathbf{5 , 9 0 8}$ |  |
| Maximum | 66 | 5,024 | $\mathbf{1 0 , 5 1 8}$ | $\mathbf{9 , 6 6 9}$ | $\mathbf{6 , 0 5 2}$ |  |
| Minimum | 40 | 5,020 | 7,800 | $\mathbf{7 , 4 0 3}$ | $\mathbf{5 , 6 4 1}$ |  |
| Difference | 26 | $\mathbf{3}$ | $\mathbf{2 , 7 1 8}$ | $\mathbf{2 , 2 6 6}$ | 411 |  |

Table 74

## Evidence For A Widespread Tethyan

According to the article ${ }^{127}$ this rock formation from North Eastern China was dated in 2007 by scientists from China and Japan. According to the essay the true age is: "Here, we report age-corrected $\mathrm{Nd}-\mathrm{Pb}-\mathrm{Sr}$ isotope data for $100-350 \mathrm{Ma}$ basalt, diabase, and gabbro from widely separated Tethyan locations in Tibet, Iran, Albania, the eastern Himalayan syntaxis, and the seafloor off NW Australia (Fig. 1)." ${ }^{128}$ The author concludes that the rocks are from the Cretaceous and Jurassic time periods: "We collected Early Jurassic to Early Cretaceous Neotethyan magmatic rocks in 1998 from outcrops along 1300 km of the Indus-Yarlung suture zone. ${ }^{129}$ Several tables ${ }^{130}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 60 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

| Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dating | 87Rb/86Sr | 207Pb/206Pb | 208Pb/232Th | 206Pb/238U |
| Summary | Age | Age | Age | Age |
| Average | $\mathbf{1 6 8}$ | $\mathbf{4 , 9 9 9}$ | $\mathbf{2 2 , 3 5 6}$ | $\mathbf{7 , 0 1 4}$ |
| Maximum | $\mathbf{1 , 7 3 9}$ | $\mathbf{5 , 2 3 6}$ | $\mathbf{5 8 , 7 9 6}$ | $\mathbf{1 5 , 7 4 7}$ |
| Minimum | $\mathbf{0}$ | $\mathbf{4 , 9 8 2}$ | $\mathbf{1 0 , 6 9 9}$ | 5,042 |
| Difference | $\mathbf{1 , 7 3 9}$ | $\mathbf{2 5 4}$ | $\mathbf{4 8 , 0 9 6}$ | $\mathbf{1 0 , 7 0 5}$ |
| Table 75 |  |  |  |  |

208Pb/232Th, Maximum Ages

| $208 \mathrm{~Pb} / 232 \mathrm{Th}$ | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 8 , 7 9 6}$ | 29,705 | 18,607 | 11,427 |
| 54,206 | 27,710 | 18,121 | 11,377 |
| 48,252 | 27,422 | 17,797 | 11,366 |
| 47,976 | 26,674 | 17,787 | 11,241 |
| 46,117 | 26,369 | 17,591 | 10,718 |
| 42,203 | 25,972 | 17,536 | 10,699 |
| 42,192 | 25,590 | 17,054 | 10,699 |
| 41,604 | 25,096 | 16,053 | 10,300 |
| 41,343 | 24,010 | 15,299 | 9,357 |
| 41,231 | 22,718 | 14,340 | $\mathbf{8 , 6 3 2}$ |
| 39,637 | 22,307 | 13,845 | $\mathbf{8 , 4 8 6}$ |
| 38,125 | 22,228 | 13,772 | $\mathbf{8 , 0 5 7}$ |
| 37,115 | 21,827 | 13,652 | $\mathbf{6 , 4 9 7}$ |
| 35,012 | 21,560 | 13,404 | 5,573 |
| 33,584 | 19,910 | 13,403 | 5,425 |
| 31,556 | 19,594 | 13,006 | 4,869 |
| 31,286 | 19,148 | 12,171 |  |
| 30,740 | 18,765 | 11,540 |  |

Table 76
206Pb/238U, Maximum Ages

| $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ |
| :---: | :---: | :---: | :---: | :---: |
| 15,747 | $\mathbf{1 1 , 3 0 9}$ | $\mathbf{8 , 7 7 0}$ | $\mathbf{6 , 6 0 2}$ | $\mathbf{5 , 7 2 4}$ |
| 15,067 | 11,248 | 8,508 | $\mathbf{6 , 5 8 9}$ | $\mathbf{5 , 7 2 0}$ |
| 14,363 | 10,360 | $\mathbf{8 , 3 1 5}$ | $\mathbf{6 , 4 2 1}$ | $\mathbf{5 , 6 0 1}$ |
| 13,580 | $\mathbf{9 , 6 4 3}$ | $\mathbf{8 , 3 1 4}$ | $\mathbf{6 , 3 9 8}$ | 5,599 |
| 13,204 | $\mathbf{9 , 4 2 7}$ | $\mathbf{8 , 0 7 2}$ | $\mathbf{6 , 3 6 9}$ | 5,573 |
| 12,780 | $\mathbf{9 , 3 0 0}$ | $\mathbf{8 , 0 2 4}$ | $\mathbf{6 , 3 5 7}$ | $\mathbf{5 , 5 1 5}$ |
| 11,757 | $\mathbf{9 , 1 2 3}$ | $\mathbf{7 , 6 0 4}$ | $\mathbf{6 , 2 1 9}$ | $\mathbf{5 , 4 6 2}$ |
| 11,659 | $\mathbf{9 , 0 1 4}$ | $\mathbf{7 , 5 0 4}$ | $\mathbf{5 , 8 6 3}$ | $\mathbf{5 , 3 1 1}$ |
| 11,537 | $\mathbf{8 , 9 9 6}$ | $\mathbf{7 , 0 5 6}$ | $\mathbf{5 , 8 6 1}$ | $\mathbf{5 , 2 8 6}$ |
| 11,313 | $\mathbf{8 , 9 5 4}$ | $\mathbf{7 , 0 0 2}$ | $\mathbf{5 , 8 0 7}$ | $\mathbf{5 , 1 2 0}$ |

Table 77

## Post-Collisional Potassic And Ultrapotassic

According to the article ${ }^{131}$ this rock formation from south west Tibet was dated in 1999 by scientists from Austria. According to the essay the true age is: "Volcanic rocks from SW Tibet, with $40 \mathrm{Ar} / 39 \mathrm{Ar}$ ages in the range $17-25 \mathrm{Ma}$." ${ }^{131}$ Numerous table and charts affirm this as the true age. ${ }^{132}$ Two tables ${ }^{133}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 100 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 3,971 times older than the youngest date.

| Age Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| 87Rb/86Sr 207Pb/206Pb 208Pb/232Th <br> 206Pb/238U   <br> Maximum Age Age Age <br> 25 5,007 99,275 <br> Age   <br> 25 5,007 95,541 <br> 5,944   <br> 25 5,001 71,706 <br> 25 5,000 70,277 <br> 25 4,997 68,343 <br> 2,715   <br> 25 4,988 67,704 <br> 2,646   |  |  |  |

Table 78

## Origin Of The Indian Ocean-Type Isotopic Signature

According to the article ${ }^{134}$ this rock formation the Philippine Sea plate was dated in 1998 by scientists from Department of Geology, Florida International University, Miami. According to the essay the true age is: "Spreading centers in three basins, the West Philippine Basin (37-60 Ma), the Parece Vela Basin (18-31 Ma), and the Shikoku Basin (17-25 Ma) are extinct, and one, the Mariana Trough ( $0-6 \mathrm{Ma}$ ), is active (Figure 1)." ${ }^{134}$ Numerous table and charts affirm this as the true age. ${ }^{135}$ Two tables ${ }^{136}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 100 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 3,971 times older than the youngest date.

Age Dating Summary

| Dating | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | 87Rb/86Sr | 147Sm/144Nd | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th |
| Average | 42 | 41 | 4,960 | 4,260 | 8,373 |
| Maximum | 55 | 54 | 4,989 | $\mathbf{7 , 0 9 3}$ | $\mathbf{1 3 , 4 3 0}$ |
| Minimum | 19 | 20 | 4,921 | $\mathbf{1 , 9 0 4}$ | $\mathbf{3 , 0 6 5}$ |
| Difference | 37 | 33 | $\mathbf{6 8}$ | 5,188 | $\mathbf{1 0 , 3 6 5}$ |

Table 79

## U-Th-Pb Dating Of Secondary Minerals

According to the article ${ }^{137}$ this rock formation Yucca Mountain, Nevada was dated in 2008 by scientists from United States Geological Survey, Geological Survey of Canada, and the Australian National University. According to the essay the true age is unknown. ${ }^{138}$ Other authors have affirmed the same problem. ${ }^{139}$ Two tables ${ }^{140}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 353 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 350,000 times older than the youngest date.

Age Dating Summary

| Dating |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 87Rb/86Sr |  |
| Summary | Age | Age | Age | Age |
| Average | $\mathbf{3 , 4 5 9}$ | 4,891 | $\mathbf{9 , 9 8 4}$ | $\mathbf{1 2}$ |
| Maximum | $\mathbf{8 , 1 2 6}$ | 31,193 | 352,962 | 13 |
| Minimum | -445 | 1 | 2 | 11 |
| Difference | $\mathbf{8 , 5 7 1}$ | $\mathbf{3 1 , 1 9 2}$ | $\mathbf{3 5 2 , 9 6 0}$ | 2 |

Table 80

Another table ${ }^{141}$ in the essay has a list of calculated dates As we can see below they are all at radical disagreement with each other. There is a spread of dates of 82 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 82,000 times older than the youngest date.

Age Dating Summary

| Dating | 206Pb/238U | 207Pb/235U | 208Pb/232Th | 87Rb/86Sr |
| :---: | :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age | Age |
| Average | 1,540 | 46 | 7,687 | 12 |
| Maximum | 20,209 | 486 | 82,030 | 13 |
| Minimum | 1 | 0 | 3 | 11 |
| Difference | 20,208 | 486 | 82,027 | 2 |
| Table 81 |  |  |  |  |

## Conclusion

Brent Dalrymple states in his anti creationist book The Age of the Earth:
"Several events in the formation of the Solar System can be dated with considerable precision." ${ }^{142}$
Looking at some of the dating it is obvious that precision is much lacking. He then goes on:
"Biblical chronologies are historically important, but their credibility began to erode in the eighteenth and nineteenth centuries when it became apparent to some that it would be more profitable to seek a realistic age for the Earth through observation of nature than through a literal interpretation of parables." ${ }^{143}$

I his book he gives a table ${ }^{144}$ with radiometric dates of twenty meteorites. If you run the figures through Microsoft Excel, you will find that they are $98.7 \%$ in agreement. There is only a seven percent difference between the ratio of the smallest and oldest dates. As we have seen in this essay, such a perfect fit is attained by selecting data and ignoring other data. A careful study of the latest research shows that such perfection is illusionary at best. The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary.

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## Rubidium/Strontium Radiometric Dating

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." ${ }^{4}$ "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

If we run the isotopic ratios give in standard geology magazines through the computer program Isoplot ${ }^{7}$ we find that the Uranium/Thorium/Lead isotopic ratios in the rocks disagree radically with the Rubidium/Strontium ages. The $\mathrm{U} / \mathrm{Th} / \mathrm{Pb}$ ratios give ages older than the evolutionist age of the Earth, Solar System, Galaxy and Universe. How can Earth rocks be dated as being older than the Big Bang?

If we use isotopic formulas ${ }^{8-11}$ given in standard geology text we can arrive at ages from the $\mathrm{Rb} / \mathrm{Sr}$ and $\mathrm{Nd} / \mathrm{Sm}$ ratios. The formula for $\mathrm{Rb} / \mathrm{Sr}$ age is given as:
$t=\frac{2.303}{\lambda} \log \left(\frac{(87 S r / 86 S r)-(87 S r / 86 S r)_{0}}{(87 R b / 86 S r)}+1\right)$

## [1]

Where $t$ equals the age in years. $\lambda$ equals the decay constant. $(87 \mathrm{Sr} / 86 \mathrm{Sr})=$ the current isotopic ratio. $(87 \mathrm{Sr} / 86 \mathrm{Sr})_{0}=$ the initial isotopic ratio. $(87 \mathrm{Rb} / 86 \mathrm{Sr})=$ the current isotopic ratio. The same is true for the formula below.
$t=\frac{2.303}{\lambda} \log \left(\frac{(143 N d / 144 N d)-(143 N d / 144 N d)_{0}}{(147 S m / 144 N d)}+1\right)$
Here are examples of isotopic ratios taken from several articles in major geology magazines which give absolutely absurd dates.

## Sm-Nd And Rb-Sr Isotopic Systematics Of Ureilites

These meteorite samples were dated in 1991 by scientist from the University of Arizona, and the University of California. According to the article ${ }^{15}$ the age of the sample is: "Whole-rock samples of these ureilites are highly depleted assemblages ( $147 \mathrm{Sm} / 144 \mathrm{Nd}=0.33-0.35$ ) having $\mathrm{Sm}-\mathrm{Nd}$ model ages consistent with 4.55 Ga .". If we run the Rubidium/Strontium isotope ratios listed in the article ${ }^{16}$ through Microsoft Excel we get the following values:

| 1. Sm/Nd Versus Rb/Sr |  |  |
| :---: | :---: | :---: |
| Dating | Age | Age |
| Summary | 147Sm $/ 144 \mathrm{Nd}$ | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ |
| Average | 4,170 | $\mathbf{7 , 7 5 9}$ |
| Maximum | 4,912 | 19,652 |
| Minimum | 2,929 | 2,423 |
| Difference | 1,983 | 17,228 |

2. $\mathrm{Rb} / \mathrm{Sr}$, Maximum Ages

| $87 \mathrm{Rb} / 86 \mathrm{Sr}$ | $87 \mathrm{Rb} / 86 \mathrm{Sr}$ |
| :---: | :---: |
| Age Sorted | Age Sorted |
| 19,652 | 10,139 |
| 17,419 | 8,490 |
| 14,812 | 7,714 |
| 13,794 | 6,819 |
| 11,015 | 5,377 |

The $\mathrm{Rb} / \mathrm{Sr}$ ratios give a 17 billion year spread of dates. I the Solar System is only 4.5 billion years old how can such stupid dates exist?

## Sr, Nd, $\mathbf{P b}$ And Os Isotopes

These samples from the Precambrian crystalline basement of Schirmacher Oasis, East Antarctica were dated in 2001 by scientist from Germany and Switzerland. ${ }^{17}$ According to the essay ${ }^{18}$ the age of the sample is 1500 million years. If we run the Lead and Rubidium isotope ratios ${ }^{19}$ through Isoplot and Microsoft Excel we get the following values:
3. Multiple Dating Summary

| Dating | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| Summary | 207Pb/206Pb | 206Pb/238U | 87Rb/86Sr | 147Sm/144Nd |
| Average | 5,069 | 9,857 | 446 | 447 |
| Maximum | 5,123 | 11,602 | 448 | 454 |
| Minimum | 5,026 | 6,403 | 444 | 439 |
| Difference | 97 | 5,198 | 3 | 14 |

4. U/Pb, Maximum Ages

| Age Sorted | Age Sorted |
| :---: | :---: |
| $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ |
| $\mathbf{1 1 , 6 0 2}$ | $\mathbf{1 0 , 3 0 3}$ |
| 11,193 | 9,534 |
| 11,158 | $\mathbf{8 , 0 9 5}$ |
| 10,568 | $\mathbf{6 , 4 0 3}$ |

The Uranium/Lead dates are 10 to 20 times older than the other two methods. The author's choice of the "true age" is just a guess. Five dates are older than the evolutionist age [10 Billion Years] of the Milky Way galaxy.

## Sr-Nd-Pb Isotope Systematics Of Mantle Xenoliths

These samples Somerset Island, Canadian Arctic were dated in 2001 by scientist from the University of Quebec. ${ }^{20}$ According to the essay ${ }^{20}$ the age of the sample is " $\mathrm{Sr}, \mathrm{Nd}$, and Pb isotopic compositions were determined for a suite of Archean garnet peridotite and garnet pyroxenite xenoliths and their host Nikos kimberlite ( 100 Ma ) from Somerset Island". If we run the Lead and Rubidium isotope ratios ${ }^{21}$ through Isoplot and Microsoft Excel we get the following values:

| 5. Multiple Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dating | 87Rb/86Sr | 147Sm/144Nd | 206Pb/238U | 207Pb/206Pb |
| Summary | Age | Age | Age | Age |
| Average | 243 | 100 | 4,349 | 4,974 |
| Maximum | 2,523 | 101 | 9,644 | 5,092 |
| Minimum | 65 | 99 | 1,173 | 4,904 |
| Difference | 2,458 | 2 | 1,991 | 31 |

6. U/Pb, Maximum Ages

| $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ |
| :---: | :---: |
| Age Sorted | Age Sorted |
| 9,644 | 5,092 |
| 8,218 | 5,001 |
| 7,359 | 4,996 |
| 6,417 | 4,992 |
| 6,280 | 4,989 |
| 5,273 | 4,987 |
| 5,231 | 4,986 |
| 5,213 | 4,985 |
| 5,033 | 4,980 |

The Uranium/Lead dates are 10 to 150 times older than the other two methods. The author's choice of the "true age" is just a guess. Eighteen dates are older than the evolutionist age [4.5 Billion Years] of the Earth.

## Strontium, Neodymium, And Lead Isotope Variations

These samples from the Alpha Ridge, central Arctic Ocean were dated in 1997 by scientist from the University of Wisconsin. ${ }^{22}$ According to the essay ${ }^{22}$ the age of the sample is "Provenance changes of silicate sediment deposited during the Late Cenozoic (5-0 Ma)". If we run the Lead 207/206 isotope ratios ${ }^{23}$ through Isoplot and Microsoft Excel we get the following values:
7. Lead 207/206 Dating Summary

| Average | 4,986 |
| :---: | :---: |
| Maximum | 5,239 |
| Minimum | 4,960 |
| Std Deviation | 40 |

According to the essay the true age by the $\mathrm{Rb} / \mathrm{Sr}$ method is just 5 million years old. That is 1,000 times younger than the Lead 207/206 dating method.

## Crystallization History Of Rhyolites At Long Valley

These samples from Long Valley, California were dated in 2002 by scientist from England and The Netherlands. ${ }^{24}$ According to the essay ${ }^{24}$ the age of the sample is "In this study, we present ${ }^{87} \mathrm{Rb} /{ }^{86} \mathrm{Sr}$ and ${ }^{230} \mathrm{Th} /{ }^{238} \mathrm{U}$ isotope analyses of glasses and phenocrysts from postcaldera rhyolites erupted between 150 to 100 ka from the Long Valley magmatic system." According to various dating charts ${ }^{25}$ the samples are only 100 thousand years old. If we run the Lead and Rubidium isotope ratios ${ }^{26}$ through Isoplot and Microsoft Excel we get the following values:

| 8. Multiple Dating Summary |  |  |
| :---: | :---: | :---: |
| Dating | Age | Age |
| Summary | 87Rb/86Sr | 207Pb/206Pb |
| Average | -2 | 4,953 |
| Maximum | 5 | 4,954 |
| Minimum | -16 | 4,951 |
| Difference | 21 | 3 |

The Lead 207/206 date is 49,500 times the so called true age. The Rubidium/Strontium dates are way off to.

## Fluid-Rock Interaction During Progressive Migration

These samples from the Cretaceous Okorusu carbonatite complex (Namibia) were dated in 2003 by scientist from England, Germany and Brazil. ${ }^{27}$ According to the essay ${ }^{27}$ the age of the sample is "A crush-leach experiment for fluid inclusions in the hydrothermal quartz yielded a $\mathrm{Rb}-\mathrm{Sr}$ isochron age of 103 Ma ." If we run the Lead and Rubidium isotope ratios ${ }^{28}$ through Isoplot and Microsoft Excel we get the following values:

| 9. Multiple Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dating | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ | $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$ | $\mathbf{2 0 7 P b} / 235 \mathrm{U}$ | 207Pb/206Pb |
| Summary | Age | Age | Age | Age |
| Average | $\mathbf{3 2}$ | $\mathbf{1 0 , 8 7 4}$ | $\mathbf{5 , 2 1 4}$ | $\mathbf{4 , 5 9 8}$ |
| Maximum | $\mathbf{3 5 1}$ | $\mathbf{3 6 , 7 6 4}$ | $\mathbf{1 0 , 6 3 8}$ | $\mathbf{5 , 0 1 9}$ |
| Minimum | $\mathbf{0}$ | $\mathbf{1 3 8}$ | $\mathbf{3 2 8}$ | $\mathbf{2 , 0 4 7}$ |
| Difference | $\mathbf{3 5 1}$ | $\mathbf{3 6 , 6 2 6}$ | $\mathbf{1 0 , 3 1 0}$ | $\mathbf{2 , 9 7 2}$ |

10. U/Pb, Maximum Ages

| $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $207 \mathrm{~Pb} / 235 \mathrm{U}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ |
| :---: | :---: | :---: |
| Age Sorted | Age Sorted | Age Sorted |
| 36,764 | 10,638 | 5,019 |
| 25,353 | 8,816 | 5,013 |
| 22,728 | 8,372 | 5,000 |
| 17,110 | 7,449 | 4,990 |
| 7,145 | 5,517 | 4,943 |
| 4,321 | 4,632 | 4,937 |
| 2,955 | 4,257 | 4,888 |

The $206 \mathrm{~Pb} / 238 \mathrm{U}$ dates are between 29 to 360 times to old. The $207 \mathrm{~Pb} / 235 \mathrm{U}$ dates are between 42 to 106 times to old. The $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ dates are all 50 times to old. The Rubidium/Strontium dates are way off to.

## Constraints On The U-Pb Isotopic Systematics

These samples from the Martian meteorite Zagami were dated in 2005 by scientist from the University of New Mexico. ${ }^{29}$ According to the essay ${ }^{29}$ the age of the sample is "Although the $\mathrm{Rb}-\mathrm{Sr}$ and $\mathrm{Sm}-\mathrm{Nd}$ systems define concordant crystallization ages of $166+-6 \mathrm{Ma}$ and $166+-12 \mathrm{Ma}$, respectively, the $\mathrm{U}-\mathrm{Pb}$ isotopic system is disturbed. Nevertheless, an age of 156 Ma is derived from the ${ }^{238} \mathrm{U}-{ }^{206} \mathrm{~Pb}$ isotopic system from the purest mineral fractions (maskelynite and pyroxene)." If we run the Lead and Rubidium isotope ratios ${ }^{30}$ through Isoplot and Microsoft Excel we get the following values:

| 11. Multiple Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Dating | Age | Age | Age |
| Summary | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ | 207Pb/206Pb | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ |
| Average | $\mathbf{4 , 5 0 1}$ | 5,081 | $\mathbf{2 , 8 2 6}$ |
| Maximum | $\mathbf{6 , 1 8 6}$ | 5,204 | $\mathbf{6 , 5 6 6}$ |
| Minimum | 4,071 | $\mathbf{4 , 9 6 2}$ | $\mathbf{2 1 8}$ |
| Difference | $\mathbf{2 , 1 1 4}$ | $\mathbf{2 4 2}$ | $\mathbf{6 , 3 4 8}$ |

All the dating methods disagree strongly with each other.

## Age And Radiogenic Isotopic Systematics

These samples from the Borden complex of northern Ontario were dated in 1986 by scientist from Carleton University, Ontario, the University of California at Santa Barbara, Santa Barbara, and the Ontario Geological Survey. ${ }^{31}$ According to the essay ${ }^{31}$ the age of the sample is " $\mathrm{Rb}-\mathrm{Sr}$ and U-Pb data from the Borden complex of northern Ontario, a carbonatite associated with the Kapuskasing Structural Zone, indicate a mid-Proterozoic age. $\mathrm{A}^{207} \mathrm{~Pb} /{ }^{206} \mathrm{~Pb}$ age of $1872 \pm 13 \mathrm{Ma}$ is interpreted as the emplacement age of this body, grouping it with other ca. 1900 Ma complexes that are the oldest known carbonatites associated with the Kapuskasing structure." If we run the Lead and Rubidium isotope ratios ${ }^{30}$ through Isoplot and Microsoft Excel we get the following values:
12. Multiple Dating Summary

| Dating | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | 147Sm/144Nd | 87Rb/86Sr | 208Pb/232Th | 207Pb/206Pb | 206Pb/238U |
| Average | 1,888 | $\mathbf{3 , 8 1 5}$ | 115,021 | 5,187 | $\mathbf{3 8 , 7 5 2}$ |
| Maximum | $\mathbf{1 , 9 0 6}$ | $\mathbf{9 , 4 0 5}$ | 124,106 | 5,212 | 44,204 |
| Minimum | 1,868 | 1,515 | 107,946 | 5,174 | $\mathbf{3 1 , 6 9 5}$ |
| Difference | $\mathbf{3 8}$ | $\mathbf{7 , 8 9 0}$ | 16,160 | 38 | 12,509 |

The maximum $208 \mathrm{~Pb} / 232 \mathrm{Th}$ age is 82 times older than the minimum $87 \mathrm{Rb} / 86 \mathrm{Sr}$ age. There is a 122 billion year difference between the oldest and youngest dates. The average $208 \mathrm{~Pb} / 232 \mathrm{Th}$ age is 115 billion years. The average $206 \mathrm{~Pb} / 238 \mathrm{U}$ age is 38 billion years.
13. U/Pb, Maximum Ages

| Age Sorted | Age Sorted | Age Sorted |
| :---: | :---: | :---: |
| $208 \mathrm{~Pb} / 232 \mathrm{Th}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ |
| 124,106 | 5,212 | 44,204 |
| 119,630 | 5,188 | 41,998 |
| 116,743 | 5,184 | 41,408 |
| 113,288 | 5,183 | 38,515 |
| 108,412 | 5,181 | 34,690 |
| 107,946 | 5,174 | 31,695 |

## Crustal Age Domains

These samples from the Mozambique Belt of Tanzania were dated in 1998 by scientist from Germany. ${ }^{33}$ According to the essay ${ }^{33}$ the age of the sample is "Most boundaries of these age domains are overprinted by Neoproterozoic (Pan-African) tectonism and metamorphism. Granitoids from the Archean craton show Nd model ages of 2.7-3.1 Ga." If we run the Lead and Rubidium isotope ratios ${ }^{34}$ through Isoplot and Microsoft Excel we get the following values:

| 14. Multiple Dating Summary |  |  |
| :---: | :---: | :---: |
| Dating | Age | Age |
| Summary | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ | $\mathbf{2 0 7 P b} / \mathbf{2 0 6 P b}$ |
| Average | $\mathbf{2 , 2 4 8}$ | $\mathbf{5 , 1 3 4}$ |
| Maximum | $\mathbf{2 , 8 6 5}$ | $\mathbf{5 , 3 3 3}$ |
| Minimum | $\mathbf{1 , 4 8 8}$ | $\mathbf{5 , 0 1 8}$ |
| Difference | $\mathbf{1 , 3 7 7}$ | $\mathbf{3 1 5}$ |

If the Rubidium/Strontium dating is accurate, the $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ dates are stupid. The Earth is only supposed to be 4.5 billion years old.

## Melt Peridotite Reactions

These samples from the Horoman Peridotite Massif, Japan were dated in 2010 by scientist from Japan. ${ }^{35}$ According to the essay ${ }^{36}$ the age of the sample is "The Re/Os isotope data of Saal et al. (2001) gave an apparent melting age of 900 Ma . Malaviarachchi et al. (2008) reported $\mathrm{Sm} / \mathrm{Nd}$ and $\mathrm{Lu} / \mathrm{Hf}$ isochron ages of 1 Ga as the partial melting age for the Horoman Massif." If we run the Lead and Hafnium isotope ratios ${ }^{37}$ through Isoplot and Microsoft Excel we get the following values:
15. Multiple Dating Summary

| Dating | Age | Age |
| :---: | :---: | :---: |
| Summary | 207Pb/206Pb | 176Lu/177Hf |
| Average | 5,014 | 440 |
| Maximum | 5,050 | 955 |
| Minimum | 4,999 | 262 |
| Difference | 52 | 693 |

The spread of dates is just random. If the Hafnium dating is accurate, the $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ dates are stupid. The Earth is only supposed to be 4.5 billion years old.

## Feldspathic Clasts In Yamato-86032

These samples from the Yamato meteorite were dated in 2006 by scientist from USA and Japan. ${ }^{38}$ According to the essay ${ }^{38}$ the age of the sample is "The Y-86032 protolith formed at least $4.43 \pm 0.03 \mathrm{Ga}$ ago as determined from a $\mathrm{Sm}-\mathrm{Nd}$ isochron for mineral fragments from the breccia clast composed predominantly of An93 anorthosite and a second clast of more varied composition." If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ and $147 \mathrm{Sm} / 144 \mathrm{Nd}$ isotope ratios ${ }^{39}$ through Isoplot and Microsoft Excel we get the following values:
16. Multiple Dating Summary

| 16. Multiple Dating Summary |  |  |
| :---: | :---: | :---: |
| Dating | Age | Age |
| Summary | 87Rb/86Sr | 147Sm/144Nd |
| Average | 4,213 | 294,470 |
| Maximum | 5,277 | 315,266 |
| Minimum | 2,575 | 251,680 |
| Difference | 2,703 | 63,586 |

The maximum $147 \mathrm{Sm} / 144 \mathrm{Nd}$ age is 122 times older than the minimum $87 \mathrm{Rb} / 86 \mathrm{Sr}$ age. There is a 300 billion year difference between the oldest and youngest dates. According to the article the initial $143 \mathrm{Nd} / 144 \mathrm{Nd}$ ratio is: "However, eNd for these data is more appropriately calculated as ENd HED $=-0.64 \pm 0.13$ relative to initial $143 \mathrm{Nd} / 144 \mathrm{Nd}$ obtained at the Johnson Space Center" ${ }^{40}$ The range is thus between -0.51 and -0.77 . If we feed those initial ratios into Microsoft Excel we get the following dating range:
17. 143Nd/144Nd, Multiple Dating Summary

| Dating | 143Nd/144Nd | 143Nd/144Nd | 143Nd/144Nd |
| :---: | :---: | :---: | :---: |
| Summary | Initial $=-0.64$ | Initial $=-0.51$ | Initial $=-0.77$ |
| Average | 294,470 | 278,990 | 308,527 |
| Maximum | 315,266 | 299,395 | 329,645 |
| Minimum | 251,680 | 237,101 | 264,990 |
| Difference | 63,586 | 62,294 | 64,655 |

Using the initial isotope range we get a minimum age of 250 billion years! We get a maximum age of 330 billion years!

## Cretaceous Seamounts Along The Continent

These samples from the Atlantic sea floor off the coast of Spain were dated in 2006 by scientist from France. ${ }^{41}$ According to the essay ${ }^{41}$ the age of the sample is "The ages reveal different pulses of alkaline magmatism occurring at $104.4 \pm 1.4$ (2r) Ma and $102.8 \pm 0.7 \mathrm{Ma}$ on the Sponge Bob seamount, at $96.3 \pm 1.0 \mathrm{Ma}$ on Ashton seamount, at $92.3 \pm 3.8 \mathrm{Ma}$ on the Gago Coutinho seamount, at $89.3 \pm 2.3 \mathrm{Ma}$ and $86.5 \pm 3.4 \mathrm{Ma}$ on the Jo Sister volcanic complex, and at $88.3 \pm 3.3 \mathrm{Ma}, 88.2 \pm 3.9$, and $80.5 \pm 0.9 \mathrm{Ma}$ on the Tore locality." If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ and Uranium/Lead isotope ratios ${ }^{42}$ through Isoplot and Microsoft Excel we get the following values:
18. Multiple Dating Summary

| Dating | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| Summary | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | 87Rb/86Sr |
| Average | 4,933 | 212 | 105 |
| Maximum | 4,943 | 702 | 293 |
| Minimum | 4,923 | 91 | 0 |
| Difference | 20 | 611 | 293 |

The three dating methods all disagree with each other. The Lead 207/206 ratios give dates 50 times to old.
19. Lead 207/206 Dating Summary

| Average | $\mathbf{3 9 0}$ |
| :---: | :---: |
| Maximum | $\mathbf{2 , 1 0 2}$ |
| Minimum | -635 |
| Difference | 2,737 |

If we run another set of Lead 207/206 ratios ${ }^{43}$ through Isoplot we find forty three of the Lead 207/206 dates are over 200 million years old. Nine have negative ages.

## Petrology And Geochemistry Of Target Rocks

These samples from the Bosumtwi impact structure, Ghana were dated in 1998 by scientist from the University of Vienna, the University of the Witwatersrand, South Africa and Dartmouth College, New Hampshire. ${ }^{44}$ According to the essay ${ }^{44}$ the age of the sample is "A best-fit line for the Bosumtwi crater rocks in a $\mathrm{Rb}-\mathrm{Sr}$ isotope evolution diagram yields an "age" of 1.98 Ga , and an initial $87 \mathrm{Sr} / 86 \mathrm{Sr}$ ratio of 0.701 , which is close to results previously obtained for granitoid intrusions in the Birimian of Ghana. Our Nd isotopic data yield depleted mantle model ages ranging from 2.16 to 2.64 Ga ," If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{45}$ through Isoplot and Microsoft Excel we get the following values:
20. Rb/Sr Dating Summary

| Average | $\mathbf{5 , 6 3 8}$ |
| :---: | :---: |
| Maximum | $\mathbf{7 , 0 1 5}$ |
| Minimum | $\mathbf{3 , 5 3 7}$ |
| Difference | $\mathbf{3 , 4 7 8}$ |

21. $\mathrm{Rb} / \mathrm{Sr}$ Dating, Maximum Ages

| 87Rb/86Sr | 87Rb/86Sr | 87Rb/86Sr |
| :---: | :---: | :---: |
| Maximum Age | Maximum Age | Maximum Age |
| $\mathbf{7 , 0 1 5}$ | $\mathbf{5 , 9 8 0}$ | $\mathbf{5 , 3 8 4}$ |
| $\mathbf{6 , 9 3 2}$ | $\mathbf{5 , 8 0 4}$ | $\mathbf{5 , 1 1 1}$ |
| $\mathbf{6 , 7 6 1}$ | $\mathbf{5 , 7 9 5}$ | $\mathbf{4 , 9 2 6}$ |
| $\mathbf{6 , 3 2 2}$ | $\mathbf{5 , 6 8 7}$ | 4,576 |
| $\mathbf{6 , 1 4 6}$ | $\mathbf{5 , 6 0 3}$ | $\mathbf{4 , 4 7 9}$ |
| $\mathbf{5 , 9 9 4}$ | $\mathbf{5 , 4 3 9}$ | $\mathbf{3 , 5 3 7}$ |

The essay claims that the model age is 2.5 billion years. The minimum age obtained is 3.5 billion years. Fourteen dates are over 5 billion years. The Earth is only supposed to be 4.5 billion years old.

## Geochronology Of The Deep Profile

These samples from the Vredefort granites in South Africa were dated in 1981 by scientist from the University of the Witwatersrand Johannesburg, South Africa. ${ }^{46}$ According to the essay ${ }^{46}$ the age of the sample is " $\mathrm{Rb}-\mathrm{Sr}$ and $\mathrm{Th}-\mathrm{Pb}$ isochrones of $\sim 3500 \mathrm{~m} . \mathrm{y}$. are recorded in the mafic granulite relicts. A companion paper (Welke and Nicolaysen this issue) provides evidence for an early crust-forming event in this sector $\sim 3800 \mathrm{~m} . \mathrm{y}$. ago. From $\sim 3500$ m.y. onward, these deeper crustal levels did not undergo addition of new Archean crust-forming material on a major scale." If we run the Uranium/Lead isotope ratios from table 3 in the article ${ }^{47}$ through Isoplot and Microsoft Excel we get the following values:

| 22. Uranium/Lead Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Dating | Age | Age | Age |
| Summary | 208Pb/232Th | 206Pb/238U | 207Pb/206Pb |
| Average | $\mathbf{1 2 , 1 4 5}$ | $\mathbf{9 , 1 0 3}$ | 4,841 |
| Maximum | $\mathbf{1 8 , 3 1 9}$ | $\mathbf{1 6 , 4 9 8}$ | $\mathbf{5 , 3 3 7}$ |
| Minimum | $\mathbf{5 , 6 5 2}$ | $\mathbf{3 , 8 6 5}$ | $\mathbf{4 , 1 6 8}$ |
| Difference | $\mathbf{1 2 , 6 6 7}$ | $\mathbf{1 2 , 6 3 3}$ | $\mathbf{1 , 1 6 9}$ |

23. Uranium/Lead Dating, Maximum Ages

| Age Sorted | Age Sorted | Age Sorted |
| :---: | :---: | :---: |
| 208Pb/232Th | 206Pb/238U | 207Pb/206Pb |
| 18,319 | 16,498 | 5,337 |
| 14,951 | 16,120 | 5,312 |
| 14,880 | 14,623 | 5,232 |
| 14,002 | 10,837 | 5,220 |
| 13,502 | 10,737 | 5,176 |
| 12,101 | $\mathbf{9 , 6 5 7}$ | $\mathbf{5 , 1 1 8}$ |
| 11,815 | $\mathbf{9 , 4 9 6}$ | 5,101 |
| 11,594 | $\mathbf{7 , 9 0 2}$ | 4,756 |
| 11,416 | 5,324 | 4,630 |
| 11,130 | 4,615 | 4,358 |
| 10,381 | 4,441 | 4,342 |
| $\mathbf{8 , 1 3 7}$ | 4,230 | 4,184 |
| 5,652 | $\mathbf{3 , 8 6 5}$ | 4,168 |

The dates are spread over almost 13 billion years between the youngest and oldest. If we run the Uranium/Lead isotope ratios from table 7 in the article ${ }^{48}$ through Isoplot and Microsoft Excel we get the following values:
24. Uranium/Lead Dating Summary

| Dating | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| Summary | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ |
| Average | $\mathbf{2 4 , 3 0 9}$ | $\mathbf{1 5 , 1 2 0}$ | $\mathbf{5 , 3 2 4}$ |
| Maximum | $\mathbf{6 4 , 6 1 0}$ | $\mathbf{2 5 , 8 9 4}$ | $\mathbf{6 , 4 9 8}$ |
| Minimum | $\mathbf{1 0 , 0 1 8}$ | $\mathbf{3 , 2 4 5}$ | $\mathbf{4 , 8 6 8}$ |
| Difference | 54,592 | $\mathbf{2 2 , 6 4 9}$ | $\mathbf{1 , 6 2 9}$ |

25. Uranium/Lead Dating, Maximum Ages

| Age | Age | Age |
| :---: | :---: | :---: |
| $208 \mathrm{~Pb} / 232 \mathrm{Th}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | 207Pb/206Pb |
| $\mathbf{6 4 , 6 1 0}$ | 25,894 | $\mathbf{6 , 4 9 8}$ |
| 50,397 | 22,874 | 5,381 |
| 40,744 | 20,347 | 5,361 |
| 33,172 | 19,156 | 5,350 |
| 28,598 | 18,933 | 5,347 |
| 26,293 | 18,341 | 5,331 |
| 18,726 | 16,394 | 5,329 |
| 15,999 | 16,373 | 5,317 |
| 14,346 | 15,949 | 5,314 |
| 13,998 | 15,794 | 5,309 |
| 13,743 | 14,580 | 5,295 |
| 11,902 | 14,220 | 5,239 |
| 11,255 | 13,743 | 5,226 |
| 10,840 | 12,171 | 5,223 |
| 10,018 | 10,175 | 5,221 |

The dates are spread over a 61 billion year range, between the youngest and oldest. If we run the Uranium/Lead isotope ratios from table 4 in the article ${ }^{49}$ through Isoplot and Microsoft Excel we get the following values:
26. Uranium/Lead Dating Summary

| Dating | Age | Age |
| :---: | :---: | :---: |
| Summary | 207Pb/235U | 206Pb/238U |
| Average | $\mathbf{3 , 2 2 0}$ | $\mathbf{3 , 4 4 6}$ |
| Maximum | $\mathbf{3 , 6 6 0}$ | $\mathbf{4 , 7 9 8}$ |
| Minimum | $\mathbf{2 , 9 3 1}$ | $\mathbf{2 , 8 8 9}$ |
| Difference | $\mathbf{7 2 8}$ | $\mathbf{1 , 9 0 9}$ |

If we run the Rubidium/Strontium isotope ratios from tables 2, 5, 6 and 8 in the article ${ }^{50}$ through Microsoft Excel we get the following values:
27. Rubidium/Strontium Dating Summary

| 27. Rubidium/Strontium Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Rb/Sr Dating Table 2 Table 5 Table 6 <br> Table 8    <br> Summary Age Age Age <br> Average $\mathbf{2 , 9 8 2}$ $\mathbf{3 , 5 1 4}$ 2,812 <br> Maximum $\mathbf{3 , 0 3 8}$ 4,523 2,888 <br> Minimum 2,886 2,848 2,726 <br> Difference 152 1,675 161 |  |  |  |  |

Again the author's choice of "true" dates and dating method is just random and meaningless.

## Mechanisms For Incompatible-Element Enrichment

These samples from the meteorite Northwest Africa 032 were dated in 2008 by scientist from the Lawrence Livermore National Laboratory, the University of New Mexico, the University of California, Berkeley and Arizona State University. ${ }^{51}$ According to the essay ${ }^{51}$ the age of the sample is "Rubidium-Sr isotopic analyses yield an age of $2947 \pm 16$ Ma." Two different diagrams ${ }^{52}$ affirm this as the true age. If we run the Rubidium/Strontium isotope ratios from table 3 in the article ${ }^{53}$ through Microsoft Excel we get the following values:
28. Rubidium/Strontium Dating Summary

| Average | $\mathbf{5 , 7 9 5}$ |
| :---: | :---: |
| Maximum | $\mathbf{1 3 , 9 3 3}$ |
| Minimum | $\mathbf{2 , 8 8 9}$ |
| Difference | $\mathbf{1 1 , 0 4 4}$ |

Out of the 11 isotope ratios, three gave ages over 10 billion years old. Two gave ages over 4 billion years old.

## A Non-Cognate Origin Of The Gibeon Kimberlites

These samples from the Gibeon Province, Namibia were dated in 2001 by scientist from England and the Netherlands. ${ }^{54}$ According to the essay ${ }^{55}$ the age of the sample is 72 million years old. If we run the various isotope ratios from the article ${ }^{56}$ through Microsoft Excel we get the following values:

| 29. Multiple Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Dating | Age | Age | Age |
| Summary | 87Rb/86Sr | 147Sm/144Nd | 207Pb/206Pb |
| Average | 107 | 72 | 4,963 |
| Maximum | 411 | 74 | 5,044 |
| Minimum | -34 | 70 | 4,907 |
| Difference | 444 | 5 | 137 |

The Lead dates are 50 times older than the Rubidium dates. The Rubidium dates were spread over a 444 million year range. The authors choice of the "true" age is just a guess.

## Zircon U-Pb Geochronology

These samples from the Shandong Province (Luxi), in the North China Craton were dated in 2007 by scientist from China and Canada. ${ }^{60}$ According to the essay ${ }^{60}$ the age of the sample is 144 billion years old. If we run the various isotope ratios from the article ${ }^{59}$ through Microsoft Excel we get the following values:
30. Multiple Dating Summary

| Dating | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| Summary | $87 \mathrm{Rb} / 86 \mathrm{Sr}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $147 \mathrm{Sm} / 144 \mathrm{Nd}$ |
| Average | 143 | 5,052 | 131 |
| Maximum | 145 | 5,107 | 144 |
| Minimum | 139 | 4,999 | -11 |
| Difference | 6 | 108 | 155 |

## Radiometric Ages Of Basaltic Achondrites

These meteorite samples were dated in 1997 by scientist from the Carnegie Institution of Washington. ${ }^{60}$ According to the essay ${ }^{60}$ the age of the sample is 4.4 billion years old. If we run the various isotope ratios from the article ${ }^{59}$ through Microsoft Excel we get the following values:

| 207Pb/P06Pb | Table 1 | Table 2 |
| :---: | :---: | :---: |
| Dating | Age Summary | Age Summary |
| Average | $\mathbf{4 , 9 4 1}$ | $\mathbf{4 , 6 8 6}$ |
| Maximum | $\mathbf{5 , 1 3 5}$ | $\mathbf{5 , 0 8 1}$ |
| Minimum | $\mathbf{4 , 5 5 7}$ | $\mathbf{4 , 3 7 1}$ |
| Difference | $\mathbf{5 7 8}$ | $\mathbf{7 1 1}$ |

## Conclusion

As we have seen in this essay, such a perfect evolutionist fit is attained by selecting data and ignoring other data. A careful study of the latest research shows that such perfection is illusionary at best. The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in evolutionist's books is selectively taken to suit and ignores data to the contrary.

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## www.Creation.com

# The Thorium Lead Dating Method 

By Paul Nethercott<br>September 2012

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 then it should not contradict the evolutionary model. According to the Big Bang theory the age of the Universe is 10 to 15 billion years. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." 4 "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

If we use the computer program Isoplot ${ }^{7}$ and calculate the ages of the isoptopic ratios in geology magazine articles we see why not dates have been put beside them. Many dates are negative or older than the age of the universe. That is logically impossible. How can the rock have formed millions of years in the future? The dating methods contradict each other and give ages that disagree with the Geological Column.

How can Earth rocks be dated as being older than the Big Bang? Here are dates calculated from several articles taken from major geology magazines which give absolutely absurd dates.

## Tracing the Indian Ocean Mantle

These samples were dated in 1998 by scientists from the School Of Ocean And Earth Science And Technology, University Of Hawaii, Honolulu. According to this article the samples were taken from volcanic material that is only 100 million years old. ${ }^{8}$ If we put isotopic ratios ${ }^{9}$ into Microsoft Excel and run the through Isoplot we find the average age is almost 17 billion years old. In Table 2 we see some fantastic dates.

| Average | $\mathbf{1 6 , 8 9 0}$ |
| :---: | :---: |
| Maximum | $\mathbf{8 2 , 5 6 1}$ |
| Minimum | $\mathbf{1 , 1 3 9}$ |
| Difference | $\mathbf{8 1 , 4 2 2}$ |

Table 1
Thorium/Lead - Maximum Ages

| Million Years | Million Years | Million Years | Million Years |
| :---: | :---: | :---: | :---: |
| $\mathbf{8 2 , 5 6 1}$ | $\mathbf{2 7 , 3 6 4}$ | $\mathbf{1 7 , 6 6 2}$ | $\mathbf{1 0 , 7 2 8}$ |
| $\mathbf{5 2 , 9 0 9}$ | $\mathbf{2 7 , 2 4 1}$ | $\mathbf{1 5 , 7 2 3}$ | $\mathbf{9 , 9 8 6}$ |
| 51,126 | $\mathbf{2 5 , 1 0 2}$ | $\mathbf{1 5 , 1 3 2}$ | $\mathbf{9 , 5 7 0}$ |
| 39,277 | 24,925 | $\mathbf{1 5 , 0 3 2}$ | $\mathbf{9 , 3 5 4}$ |
| 37,502 | 23,860 | $\mathbf{1 4 , 9 5 0}$ | $\mathbf{9 , 3 3 1}$ |
| 35,301 | 23,310 | $\mathbf{1 4 , 6 9 9}$ | $\mathbf{9 , 2 9 0}$ |
| 31,541 | 21,943 | $\mathbf{1 4 , 2 3 2}$ | $\mathbf{9 , 1 4 1}$ |
| $\mathbf{3 0 , 6 0 8}$ | $\mathbf{2 0 , 2 6 6}$ | $\mathbf{1 3 , 7 7 8}$ | $\mathbf{6 , 9 2 9}$ |
| 28,811 | $\mathbf{2 0 , 1 4 4}$ | $\mathbf{1 3 , 2 7 6}$ | $\mathbf{6 , 6 6 3}$ |
| 28,284 | $\mathbf{1 9 , 0 0 5}$ | $\mathbf{1 2 , 1 4 0}$ | $\mathbf{6 , 5 9 0}$ |
| 27,460 | $\mathbf{1 8 , 6 7 4}$ | $\mathbf{1 1 , 7 5 4}$ | $\mathbf{6 , 5 0 5}$ |

## Table 2

## Petrogenesis of the Flood Basalts

These samples were dated in 1998 by scientists from the Department Of Earth, Atmospheric And Planetary Sciences, Massachusetts Institute Of Technology. According to this article the samples were taken from the volcanic crust of the Kerguelen Archipelago that is only 30 million years old. ${ }^{10}$ If we put isotopic ratios ${ }^{11}$ into Microsoft Excel and run the through Isoplot we find the average age of Mount Bureau is over 5 billion years old. In Table 3 we see some fantastic dates for both mountains.

| Thorium/Lead - Maximum Ages |  |
| :---: | :---: |
| Mount Bureau | Mount Rabouillere |
| $\mathbf{4 4 , 3 7 8}$ | $\mathbf{7 , 7 8 8}$ |
| $\mathbf{9 , 0 9 2}$ | $\mathbf{7 , 5 1 8}$ |
| $\mathbf{8 , 6 5 1}$ | $\mathbf{7 , 4 1 6}$ |
| $\mathbf{8 , 6 2 4}$ | $\mathbf{6 , 5 6 0}$ |
| $\mathbf{8 , 1 4 4}$ | $\mathbf{6 , 4 2 2}$ |
| $\mathbf{8 , 1 4 2}$ | $\mathbf{6 , 3 2 8}$ |
| $\mathbf{8 , 0 2 3}$ | $\mathbf{6 , 2 1 6}$ |
| $\mathbf{7 , 5 0 7}$ | $\mathbf{5 , 9 6 6}$ |
| $\mathbf{7 , 2 4 5}$ | $\mathbf{4 , 4 0 6}$ |
| $\mathbf{7 , 0 4 6}$ | $\mathbf{2 , 7 9 9}$ |
| $\mathbf{6 , 9 6 1}$ |  |
| $\mathbf{6 , 5 4 8}$ |  |
| $\mathbf{5 , 7 8 7}$ |  |
| $\mathbf{5 , 7 7 3}$ |  |
| $\mathbf{5 , 6 3 9}$ |  |
| 5,613 |  |
| 5,107 |  |

## Nature of the Source Regions

These samples were dated in 2004 by scientists from the Department Of Earth Sciences, The Open University, England. According to the article: "Most samples are Miocene in age, ranging from 10 to 25 Ma in the south and 19Ma to the present day in northern Tibet." ${ }^{12,13}$ If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ ratios ${ }^{14}$ in the essay through Isoplot we get dates between 1 and 24 million years. If we run the Uranium/Lead ratios ${ }^{15}$ in the essay through Isoplot we get unbelievable dates as listed below in Table 4.

| Thorium/Lead - Maximum Ages |  |
| :---: | :---: |
| North Tibet | South Tibet |
| Age | Age |
| $\mathbf{8 8 , 2 9 4}$ | $\mathbf{3 3 , 1 9 1}$ |
| $\mathbf{8 1 , 6 1 4}$ | $\mathbf{2 5 , 0 1 5}$ |
| $\mathbf{1 3 , 4 7 5}$ | $\mathbf{1 1 , 1 0 2}$ |
| 11,504 | $\mathbf{9 , 2 6 5}$ |
| $\mathbf{1 1 , 4 2 0}$ | $\mathbf{8 , 2 0 5}$ |
| $\mathbf{1 1 , 3 5 0}$ | $\mathbf{6 , 0 9 2}$ |
|  |  |
| Table 4,826 |  |

## Generation of Palaeocene Adakitic Andesites

These samples were dated in 2007 by scientists from the Chinese Academy Of Sciences, Wushan, Guangzhou. According to the article: "The initial $\mathrm{Sr}, \mathrm{Nd}$ and Pb isotopic ratios were corrected using the $\mathrm{Ar} / \mathrm{Ar}$ age of $55 \mathrm{Ma} .{ }^{16},{ }^{17}$ If we run the Uranium/Lead ratios ${ }^{18}$ in the essay through Isoplot we get unbelievable dates as listed below in Table 5.

| Thorium/Lead - Maximum Ages |  |
| :---: | :---: |
| Sample | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ |
| $04 Y J-6$ | $\mathbf{1 0 , 5 1 8}$ |
| $04 Y J-5$ | $\mathbf{1 0 , 2 7 7}$ |
| $04 Y J-9$ | 8,529 |
| $04 Y J-7$ | $\mathbf{8 , 3 6 0}$ |
| $04 Y J-1$ | $\mathbf{8 , 1 6 5}$ |
| $04 Y J-2$ | $\mathbf{7 , 8 0 0}$ |

## Table 5

## Evidence for a Widespread Tethyan Upper Mantle

In 2005 scientists from the School of Ocean and Earth Science and Technology, University of Hawaii, Honolulu dated these rocks. According to the article: "Isotopic data for such sites show that mantle similar to that beneath the modern Indian Ocean was present, at least in places, as long ago as 140 Ma , the age of the oldest true Indian Ocean crust yet sampled." ${ }^{19,20}$ If we run the $\mathrm{Rb} / \mathrm{Sr}$ ratios ${ }^{21}$ through Isoplot we see that the average age is 168 million years. [Table 6]

Rb/Sr Ages Summary

| Average | $\mathbf{1 6 8}$ |
| :---: | :---: |
| Maximum | $\mathbf{1 , 7 3 9}$ |
| Minimum | 0 |
| Difference | 1,739 |

Table 6
If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{22}$ through Isoplot we see that the average age is 22,675 million years. [Table 7]
Pb/Th Ages Summary

| Maximum | Minimum | Difference | Average |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 8 , 7 9 5}$ | $\mathbf{4 , 8 6 9}$ | $\mathbf{5 3 , 9 2 6}$ | $\mathbf{2 2 , 6 7 5}$ |

Table 7

Thorium/Lead - Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| 58,796 | 29,705 | 18,607 | 11,427 |
| 54,206 | 27,710 | 18,121 | 11,377 |
| 48,252 | 27,422 | 17,797 | 11,366 |
| 47,976 | 26,674 | 17,787 | 11,241 |
| 46,117 | 26,369 | 17,591 | 10,718 |
| 42,203 | 25,972 | 17,536 | 10,699 |
| 42,192 | 25,590 | 17,054 | 10,699 |
| 41,604 | 25,096 | 16,053 | 10,300 |
| 41,343 | 24,010 | 15,299 | 9,357 |
| 41,231 | 22,718 | 14,340 | 8,632 |
| 39,637 | 22,307 | 13,845 | 8,486 |
| 38,125 | 22,228 | 13,772 | 8,057 |
| 37,115 | 21,827 | 13,652 | 6,497 |
| 35,012 | 21,560 | 13,404 | 5,573 |
| 33,584 | 19,910 | 13,403 | 5,425 |
| 31,556 | 19,594 | 13,006 | 4,869 |
| 31,286 | 19,148 | 12,171 |  |
| 30,740 | 18,765 | 11,540 |  |

Table 8

## Post-Collisional Potassic and Ultrapotassic

According to the article: "Major and trace element, $\mathrm{Sr}-\mathrm{Nd}-\mathrm{Pb}-\mathrm{O}$ isotope and mineral chemical data are presented for post-collisional ultrapotassic, silicic and high-K calc-alkaline volcanic rocks from SW Tibet, with $40 \mathrm{Ar} / 39 \mathrm{Ar}$ ages in the range $17-25 \mathrm{Ma} .{ }^{23}{ }^{24}$ If we run the $\mathrm{Rb} / \mathrm{Sr}$ ratios ${ }^{25}$ through Isoplot we see that the average age is 43 million years. [Table 9]

| Rb/Sr Ages Summary |  |
| :---: | :---: |
| Average | $\mathbf{4 3}$ |
| Maximum | $\mathbf{1 , 2 5 8}$ |
| Minimum | $\mathbf{- 1 , 4 3 9}$ |
| Difference | $\mathbf{2 , 6 9 7}$ |
| Table 9 |  |

If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{26}$ through Isoplot we see that the average age is 78,808 million years. [Table 10]
Pb/Th Ages Summary

| Maximum | Minimum | Difference | Average |
| :---: | :---: | :---: | :---: |
| 99,275 | $\mathbf{6 7 , 7 0 4}$ | $\mathbf{3 1 , 5 7 0}$ | $\mathbf{7 8 , 8 0 8}$ |

Table 10

In Table 11 we see a comparison between the model age ["True Age"] and the isotopic age derived from atomic ratios. We can see how far in error the Thorium dating system is.

## 208Pb/232Th Ages

| Age | Model Age |
| :---: | :---: |
| 68,343 | 43 |
| 67,704 | 43 |
| 70,277 | 43 |
| 71,706 | 43 |
| 95,541 | 43 |
| 99,275 | 43 |

Table 11

## Continental Lithospheric Contribution to Alkaline

According to the article: "These two genetically related alkaline complexes were emplaced at the east Atlantic continent-ocean boundary during the Upper Cretaceous, i.e. 66-72 m. y. ago" ${ }^{27}$ If we run the $\mathrm{Rb} / \mathrm{Sr}$ ratios ${ }^{28}$ through Isoplot we see that the average age is 65 million years. [Table 9]

Rb/Sr Ages Summary

| Average | 65 |
| :---: | :---: |
| Maximum | $\mathbf{7 4}$ |
| Minimum | 4 |
| Difference | 78 |

Table 12
If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{28}$ through Isoplot we see that the average age is 6,126 million years. [Table 13]

Pb/Th Ages Summary

| Maximum | Minimum | Difference | Average |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 0 , 0 8 4}$ | $\mathbf{2 , 6 1 6}$ | $\mathbf{7 , 4 6 7}$ | $\mathbf{6 , 1 2 6}$ |

Table 13

208Pb/232Th Ages

| Age | Model Age |
| :---: | :---: |
| 208Pb/232Th | Million Years |
| $\mathbf{1 0 , 0 8 4}$ | 66 |
| 9,320 | 66 |
| 8,101 | 66 |
| 7,502 | 66 |
| 7,080 | 66 |
| 6,891 | 66 |
| 6,655 | 66 |
| 6,313 | 66 |
| 5,830 | 66 |
| 5,755 | 66 |
| 5,029 | 66 |

Table 14

## Pin Pricking The Elephant

According to tables ${ }^{29}$ in the article, the rock formation is only 120 million years old. If we run the ${ }^{207} \mathrm{~Pb}{ }^{206} \mathrm{~Pb}$ ratios ${ }^{30}$ through Isoplot we get an average age of 5,000 million years. If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{31}$ through Isoplot we see in Table 15 that the age is between 12 billion and 14 billion years old.

| 208Pb/232Th Ages |  |  |  |
| :---: | :---: | :---: | :---: |
| Pb/Pb Age | $\mathbf{5 , 3 7 9}$ | $\mathbf{5 , 3 8 5}$ | $\mathbf{5 , 0 0 0}$ |
| $\mathrm{Pb} /$ Th Age | $\mathbf{1 2 , 0 9 0}$ | $\mathbf{1 2 , 8 4 5}$ | $\mathbf{1 4 , 4 5 9}$ |
| $\mathbf{P b} / \mathrm{U}$ Age | 4,579 | 5,498 | $\mathbf{6 , 9 3 6}$ |

Table 15

## Chronology And Geochemistry Of Lavas

According to the article: "New $\left.{ }^{40} \mathrm{Ar}\right)^{39} \mathrm{Ar}$ incremental heating age determinations for dredged rocks from volcanoes east of Salas y Gomez Island show that, with very few exceptions, ages increase steadily to the east from 1.4 to $30 \mathrm{Ma}{ }^{32}$ Tables ${ }^{33}$ in the article affirms this as the true age of the geological formation. ${ }^{33}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{34}$ through Isoplot we see that the average age is 8,325 million years. [Table 16] In Table 17 we see some of the incredible dates all the way from 5 billion to almost 24 billion years old.

## $\mathrm{Pb} / \mathrm{Th}$ Ages Summary

| Chronology | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | $\mathbf{4 , 9 1 9}$ | $\mathbf{3 , 6 9 4}$ | $\mathbf{8 , 3 2 5}$ |
| Maximum | $\mathbf{4 , 9 7 1}$ | $\mathbf{9 , 6 4 5}$ | $\mathbf{2 3 , 8 5 0}$ |
| Minimum | $\mathbf{4 , 8 8 1}$ | $\mathbf{1 , 1 6 6}$ | $\mathbf{4 , 1 2 9}$ |
| Difference | $\mathbf{9 0}$ | $\mathbf{8 , 4 7 9}$ | $\mathbf{1 9 , 7 2 0}$ |

Thorium/Lead - Maximum Ages

| Age | Age |
| :---: | :---: |
| $\mathbf{2 3 , 8 5 0}$ | $\mathbf{6 , 4 9 8}$ |
| $\mathbf{1 6 , 9 4 2}$ | $\mathbf{6 , 4 2 1}$ |
| $\mathbf{1 5 , 3 6 4}$ | $\mathbf{6 , 3 9 6}$ |
| $\mathbf{1 3 , 0 0 4}$ | $\mathbf{6 , 2 9 8}$ |
| $\mathbf{9 , 0 6 1}$ | $\mathbf{6 , 2 4 5}$ |
| $\mathbf{8 , 3 9 3}$ | $\mathbf{5 , 8 9 6}$ |
| $\mathbf{7 , 6 5 4}$ | $\mathbf{5 , 8 4 8}$ |
| $\mathbf{7 , 5 9 9}$ | $\mathbf{5 , 7 5 4}$ |
| $\mathbf{7 , 1 0 1}$ | $\mathbf{5 , 4 5 3}$ |
| $\mathbf{7 , 0 5 4}$ | $\mathbf{5 , 4 4 6}$ |
| $\mathbf{6 , 6 0 7}$ |  |

## Table 17

## Ion Microprobe U-Th-Pb Dating

According to the article: "The formation age of this meteorite is $1.53 \pm 0.46 \mathrm{Ga}$. On the other hand, the data of nine apatite grains from Lafayette are well represented by planar regression rather than linear regression, indicating that its formation age is $1.15 \pm 0.34 \mathrm{Ga}{ }^{35}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{36}$ through Isoplot we see that the average age is 20,409 million years. [Table 18] In Table 19 we see some of the incredible dates all the way from 7 billion to over 40 billion years old.

Uranium/Thorium/Lead - Ages Summary

| Chronological | 238U/206Pb | Th232/Pb208 | Pb207/Pb206 |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | 4,416 | 20,409 | 4,768 |
| Maximum | $\mathbf{8 , 9 7 5}$ | 40,271 | 5,348 |
| Minimum | $\mathbf{1 , 2 4 5}$ | 7,426 | 3,897 |
| Standard Dev | $\mathbf{2 , 0 2 3}$ | $\mathbf{9 , 1 0 1}$ | $\mathbf{3 3 7}$ |
|  |  |  |  |

Table 18

Thorium/Lead - Maximum Ages

| Age | Age |
| :---: | :---: |
| 40,271 | 17,062 |
| 38,926 | 16,516 |
| 29,016 | 15,349 |
| 28,642 | 13,929 |
| 26,241 | 13,153 |
| 24,801 | 12,380 |
| 23,510 | 11,689 |
| 21,169 | 11,334 |
| 18,374 | 7,426 |
| 17,980 |  |

Table 18

## U-Th-Pb Dating Of Secondary Minerals

This dating was done in 2008 on minerals from Yucca Mountain, Nevada. It was done by scientists from the U.S. Geological Survey, Denver, Colorado, the Geological Survey of Canada, Ottawa, Ontario and the Research School of Earth Sciences and Planetary Science Institute, The Australian National University. According to the article: "Most ${ }^{206} \mathrm{~Pb} /{ }^{238} \mathrm{U}$ ages determined for the calcite subsamples are much older than the $12.8-\mathrm{Ma}$ age of the host tuff (Table 3 and Fig. 5) and thus unreasonable." ${ }^{37}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{38}$ through Isoplot we see that the average age is 10,000 million years [Table 19]. The $\mathrm{Rb} / \mathrm{Sr}$ ratios ${ }^{39}$ gave a uniform result of 11 to 13 million years old [Table 19].
$\underline{\underline{\text { 208Pb/232Th Ages Versus Rb/Sr Ages }}}$

| Chronological | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 87Rb/86Sr |
| :---: | :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age | Age |
| Average | $\mathbf{3 , 4 5 9}$ | 4,891 | 9,984 | 12 |
| Maximum | $\mathbf{8 , 1 2 6}$ | 31,193 | 352,962 | 13 |
| Minimum | -445 | 1 | 2 | 11 |
| Difference | $\mathbf{8 , 5 7 1}$ | $\mathbf{3 1 , 1 9 2}$ | 352,960 | 2 |

Table 19
Another set of dates ${ }^{40}$ in the essay [Table 20] give dates as high as 82 billion years old.
Uranium/Thorium/Lead - Ages Summary

| Summary | ${ }^{206} \mathrm{~Pb} /{ }^{238} \mathrm{U}$ | ${ }^{207} \mathrm{~Pb} /{ }^{235} \mathrm{U}$ | ${ }^{208} \mathrm{~Pb} /{ }^{232} \mathrm{Th}$ |
| :---: | :---: | :---: | :---: |
| Average | $\mathbf{1 , 5 4 0}$ | 46 | $\mathbf{7 , 6 8 7}$ |
| Maximum | $\mathbf{2 0 , 2 0 9}$ | 486 | $\mathbf{8 2 , 0 3 0}$ |


| Minimum | 1 | 0 | 3 |
| :---: | :---: | :---: | :---: |
| Difference | $\mathbf{2 0 , 2 0 8}$ | 486 | $\mathbf{8 2 , 0 2 7}$ |
| Table 20 |  |  |  |

## The Influence of High U-Th Inclusions

This dating was done in 1998 by scientists from Zurich, Switzerland. According to the article: "The U-Th-Pb data from the bulk dissolutions are highly complex and yield apparent ages ranging from 1000 Ma to 30 Ma ." ${ }^{41}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{42}$ through Isoplot we see that the dates vary from 300 to over 14,000 million years old [Table 21].

Uranium/Thorium/Lead - Ages Summary

| Dating | 206Pb/238U | 208Pb/232Th | Pb207/Pb206 |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Ages |
| Average | $\mathbf{5 , 3 4 2}$ | $\mathbf{3 , 5 7 9}$ | $\mathbf{4 , 7 0 9}$ |
| Maximum | $\mathbf{2 9 , 0 4 0}$ | $\mathbf{1 4 , 3 1 6}$ | $\mathbf{5 , 0 0 0}$ |
| Minimum | $\mathbf{2 7 0}$ | $\mathbf{2 8 8}$ | $\mathbf{3 , 9 2 4}$ |
| Std Deviation | $\mathbf{9 , 0 4 2}$ | $\mathbf{5 , 1 9 2}$ | $\mathbf{3 6 8}$ |

Table 21

If we run another set of $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{43}$ through Isoplot we see that the dates vary from 160 to over 37,000 million years old [Table 22].

Uranium/Thorium/Lead - Ages Summary

| Dating | 206Pb/238U | 208Pb/232Th | Pb207/Pb206 |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Ages |
| Average | 1,621 | $\mathbf{4 , 0 8 4}$ | $\mathbf{4 , 1 8 0}$ |
| Maximum | 14,008 | 37,154 | $\mathbf{5 , 0 4 2}$ |
| Minimum | 177 | 161 | 1,325 |
| Std Deviation | 3,931 | 11,000 | $\mathbf{1 , 3 8 6}$ |
| Table 22 |  |  |  |

## U, Th And Pb Isotope Compositions

These samples were dated in 2009 by scientists from the Arthur Holmes Isotope Geology Laboratory, Department of Earth Sciences, Durham University. ${ }^{44}$ According to the article: "Detailed petrographic and geochemical descriptions of the samples presented here can be found elsewhere" ${ }^{45}$ If we examine what these other people ${ }^{46-49}$ have said about the same rock formation the consensus is that it is three million years old.
If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{50}$ through Isoplot we see that the dates vary from 2,000 to over 92,000 million years old [Table 23].

Uranium/Thorium/Lead - Ages Summary

| Dating | 232Th/208Pb | 238U/206Pb | 207Pb/206Pb |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | $\mathbf{8 , 0 9 7}$ | $\mathbf{4 , 2 7 1}$ | $\mathbf{4 , 9 1 5}$ |
| Maximum | $\mathbf{9 2 , 4 9 5}$ | $\mathbf{1 8 , 6 3 9}$ | $\mathbf{5 , 0 0 8}$ |
| Minimum | $\mathbf{1 , 9 3 9}$ | $\mathbf{1 , 4 3 7}$ | $\mathbf{4 , 8 7 1}$ |
| Difference | $\mathbf{9 0 , 5 5 6}$ | $\mathbf{1 7 , 2 0 2}$ | $\mathbf{1 3 7}$ |

Table 23

| Uranium/Thorium/Lead - Maximum Ages |  |  |  |
| :---: | :---: | :---: | :---: |
| 232Th/208Pb | 238U/206Pb | 207Pb/206Pb |  |
| Age | Age | Age |  |
| 92,495 | $\mathbf{1 8 , 6 3 9}$ | $\mathbf{5 , 0 0 8}$ |  |
| 73,503 | $\mathbf{1 5 , 3 0 7}$ | $\mathbf{5 , 0 0 1}$ |  |
| 42,038 | $\mathbf{1 0 , 7 7 2}$ | $\mathbf{5 , 0 0 0}$ |  |
| 29,253 | $\mathbf{1 0 , 3 1 2}$ | $\mathbf{4 , 9 9 6}$ |  |
| 13,018 | $\mathbf{9 , 2 9 1}$ | $\mathbf{4 , 9 8 4}$ |  |
| 10,956 | $\mathbf{5 , 6 2 5}$ | $\mathbf{4 , 9 6 4}$ |  |
| 10,621 | $\mathbf{4 , 5 0 8}$ | $\mathbf{4 , 9 5 9}$ |  |
| 10,022 | $\mathbf{3 , 7 6 7}$ | $\mathbf{4 , 9 4 9}$ |  |
| Table 24 |  |  |  |

## U-Th-Pb Isotope Data

According to the article: "In contrast to the apparent ${ }^{207} \mathrm{~Pb}-{ }^{206} \mathrm{~Pb}$ ages, the minimum depositional age of the Warrawoona Group is $3,426 \mathrm{Ma}$ based on a $\mathrm{U}-\mathrm{Pb}$ zircon age from the Panorama Formation." ${ }^{51}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{52}$ through Isoplot we see that the dates vary from 25,000 to over 100,000 million years old [Table 25]. In Table 26 we can see the maximum ages for each dating method.

Uranium/Thorium/Lead - Ages Summary

| Dating | 207Pb/206Pb | 206/Pb/238U | 208Pb/232Th |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | 5,325 | $\mathbf{1 5 , 1 9 2}$ | 56,976 |
| Maximum | 5,403 | $\mathbf{3 1 , 0 0 5}$ | $\mathbf{1 0 0 , 6 0 1}$ |
| Minimum | 5,222 | $\mathbf{7 , 1 3 8}$ | $\mathbf{2 4 , 9 8 0}$ |
| Std Deviation | 52 | $\mathbf{6 , 4 2 1}$ | $\mathbf{2 2 , 4 1 7}$ |

Table 25

Uranium/Thorium/Lead - Maximum Ages

| 207Pb/206Pb | 206Pb/238U | 208Pb/232Th |
| :---: | :---: | :---: |
| Age | Age | Age |
| 5403 | $\mathbf{3 1 , 0 0 5}$ | $\mathbf{1 0 0 , 6 0 1}$ |
| 5395 | 20,343 | $\mathbf{8 4 , 4 5 7}$ |
| 5390 | 19,584 | $\mathbf{7 3 , 9 6 8}$ |
| 5351 | 17,306 | $\mathbf{6 7 , 4 2 3}$ |
| 5339 | 17,088 | $\mathbf{5 8 , 3 5 3}$ |
| 5332 | 13,410 | $\mathbf{5 7 , 1 1 6}$ |
| 5328 | 13,022 | 55,311 |
| 5315 | 11,479 | 51,607 |
| 5298 | 11,353 | 44,439 |
| 5296 | $\mathbf{1 0 , 6 5 2}$ | $\mathbf{3 9 , 0 9 0}$ |
| 5289 | 9,926 | 26,361 |
| 5269 | $\mathbf{7 , 1 3 8}$ | 24,980 |

Table 26

## Evolution Of Reunion Hotspot Mantle

According to the article: "In the same context, the Trend 1 data imply that (1) the isotopic composition of the Reunion end-member has changed relatively little in the last $66 \mathrm{~m} . \mathrm{y}$." ${ }^{53}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{54}$ through Isoplot we see that the dates vary from 5,000 to over 13,000 million years old [Table 27]. In Table 28 we can see the maximum ages for the Thorium/Lead dating method.

Uranium/Thorium/Lead - Ages Summary

| Dating | 238U/206Pb | 232Th/208Pb | 207Pb/206Pb |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | $\mathbf{4 , 4 4 9}$ | $\mathbf{8 , 0 7 9}$ | $\mathbf{4 , 9 7 6}$ |
| Maximum | $\mathbf{6 , 2 8 5}$ | $\mathbf{1 3 , 2 8 7}$ | $\mathbf{5 , 0 1 6}$ |
| Minimum | $\mathbf{3 , 0 1 0}$ | $\mathbf{5 , 6 4 1}$ | $\mathbf{4 , 9 5 3}$ |
| Std Deviation | $\mathbf{9 1 6}$ | $\mathbf{2 , 0 8 6}$ | $\mathbf{1 8}$ |

Table 27

Thorium/Lead - Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 3 , 2 8 7}$ | $\mathbf{8 , 7 2 5}$ | $\mathbf{7 , 3 6 3}$ | $\mathbf{6 , 5 4 0}$ |
| $\mathbf{1 1 , 8 3 2}$ | $\mathbf{8 , 6 0 9}$ | $\mathbf{7 , 3 6 2}$ | $\mathbf{6 , 4 7 9}$ |
| $\mathbf{1 1 , 0 1 7}$ | $\mathbf{7 , 5 4 1}$ | $\mathbf{7 , 0 8 0}$ | $\mathbf{6 , 3 2 3}$ |
| $\mathbf{1 0 , 3 5 7}$ | $\mathbf{7 , 5 1 7}$ | $\mathbf{7 , 0 1 7}$ | $\mathbf{5 , 6 6 0}$ |
| $\mathbf{9 , 1 0 1}$ | $\mathbf{7 , 4 4 6}$ | $\mathbf{6 , 6 7 9}$ | $\mathbf{5 , 6 4 1}$ |

Table 28

## Continental Growth 3.2 Gyr Ago

According to the article the rock formation is 3,200 million years old. ${ }^{55}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{55}$ through Isoplot we see that the dates vary from negative 24,000 to over 11,000 million years old [Table 29]. In Table 30 we can see the maximum ages for the Thorium/Lead dating method.

Uranium/Thorium/Lead - Ages Summary

| Summary | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ | $238 \mathrm{U} / 206 \mathrm{~Pb}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ |
| :---: | :---: | :---: | :---: |
| Average | $\mathbf{3 , 2 7 3}$ | $\mathbf{3 , 3 0 0}$ | $\mathbf{3 , 2 9 6}$ |
| Maximum | $\mathbf{1 1 , 5 1 7}$ | $\mathbf{4 , 4 6 3}$ | $\mathbf{3 , 8 9 7}$ |
| Minimum | $\mathbf{- 2 4 , 2 9 5}$ | $\mathbf{1 , 5 6 0}$ | $\mathbf{2 , 6 6 7}$ |
| Difference | $\mathbf{3 5 , 8 1 3}$ | $\mathbf{2 , 9 0 2}$ | $\mathbf{1 , 2 2 9}$ |

Table 29
Thorium/Lead - Maximum Ages

| Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 1 , 5 1 7}$ | $\mathbf{5 , 3 2 2}$ | $\mathbf{5 , 0 8 3}$ | $\mathbf{4 , 6 6 8}$ | $\mathbf{4 , 6 0 1}$ |
| $\mathbf{6 , 0 2 7}$ | $\mathbf{5 , 2 8 9}$ | $\mathbf{4 , 7 7 6}$ | $\mathbf{4 , 6 6 2}$ | $\mathbf{- 3 6 6}$ |
| $\mathbf{5 , 8 0 6}$ | $\mathbf{5 , 1 3 0}$ | $\mathbf{4 , 7 0 9}$ | $\mathbf{4 , 6 3 8}$ | $\mathbf{- 2 , 4 8 5}$ |
| 5,704 | $\mathbf{5 , 0 9 5}$ | $\mathbf{4 , 7 0 4}$ | $\mathbf{4 , 6 1 4}$ | $\mathbf{- 2 4 , 2 9 5}$ |
| 5,568 | $\mathbf{5 , 0 8 5}$ | $\mathbf{4 , 6 9 0}$ | $\mathbf{4 , 6 1 0}$ | $\mathbf{- 2 4 , 2 9 5}$ |
| Table 30 |  |  |  |  |

Table 30

## Uranium-Lead Zircon Ages

If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{56}$ through Isoplot we see that the dates vary from 6,000 to over 55,000 million years old [Table 31]. In Table 32 we can see the maximum ages for each dating method.

Uranium/Thorium/Lead - Ages Summary

| Dating | 206Pb/238U | 208Pb/232Th | 207Pb/206Pb |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | 11,159 | 17,193 | 4,933 |
| Maximum | 23,421 | 55,110 | 4,997 |
| Minimum | 3,108 | 6,130 | 4,799 |
| Std Deviation | 6,223 | 13,524 | 59 |

Table 31

Uranium/Thorium/Lead - Maximum Ages

| 206Pb/238U | 208Pb/232Th | 207Pb/206Pb |
| :---: | :---: | :---: |
| Age | Age | Age |
| $\mathbf{2 3 , 4 2 1}$ | $\mathbf{5 5 , 1 1 0}$ | $\mathbf{4 , 9 9 7}$ |
| $\mathbf{2 0 , 3 8 7}$ | $\mathbf{2 9 , 7 4 2}$ | $\mathbf{4 , 9 9 1}$ |
| $\mathbf{1 8 , 9 0 9}$ | $\mathbf{2 7 , 8 8 9}$ | $\mathbf{4 , 9 8 1}$ |
| $\mathbf{1 7 , 1 4 3}$ | $\mathbf{2 7 , 0 5 1}$ | $\mathbf{4 , 9 7 6}$ |
| $\mathbf{1 6 , 7 8 4}$ | $\mathbf{2 1 , 3 1 8}$ | $\mathbf{4 , 9 7 2}$ |
| $\mathbf{1 5 , 3 2 0}$ | $\mathbf{1 9 , 2 2 4}$ | $\mathbf{4 , 9 6 9}$ |
| $\mathbf{1 2 , 8 5 1}$ | $\mathbf{1 8 , 0 9 1}$ | $\mathbf{4 , 9 6 5}$ |
| $\mathbf{1 2 , 0 1 2}$ | $\mathbf{1 7 , 9 4 4}$ | $\mathbf{4 , 9 5 7}$ |
| $\mathbf{1 0 , 5 7 9}$ | $\mathbf{1 6 , 4 7 4}$ | $\mathbf{4 , 9 5 3}$ |
| $\mathbf{9 , 6 7 7}$ | $\mathbf{1 5 , 0 5 9}$ | $\mathbf{4 , 9 4 9}$ |
| $\mathbf{9 , 4 2 4}$ | $\mathbf{1 4 , 7 7 9}$ | $\mathbf{4 , 9 4 7}$ |
| $\mathbf{9 , 0 9 9}$ | $\mathbf{1 3 , 3 7 4}$ | $\mathbf{4 , 9 4 5}$ |
| $\mathbf{9 , 0 4 4}$ | $\mathbf{1 1 , 9 5 1}$ | $\mathbf{4 , 9 2 5}$ |
| $\mathbf{8 , 0 9 4}$ | $\mathbf{1 0 , 7 8 3}$ | $\mathbf{4 , 9 2 1}$ |
| $\mathbf{6 , 7 7 6}$ | $\mathbf{9 , 3 3 6}$ | $\mathbf{4 , 9 1 5}$ |
| $\mathbf{5 , 7 1 9}$ | $\mathbf{8 , 6 4 4}$ | $\mathbf{4 , 9 1 0}$ |
| $\mathbf{5 , 5 0 0}$ | $\mathbf{8 , 0 5 8}$ | $\mathbf{4 , 8 9 2}$ |

Table 32

Thorium/Lead - Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| 55,110 | 19,224 | 14,779 | $\mathbf{8 , 6 4 4}$ |
| 29,742 | 18,091 | 13,374 | $\mathbf{8 , 0 5 8}$ |
| 27,889 | 17,944 | 11,951 | $\mathbf{6 , 7 2 1}$ |
| 27,051 | $\mathbf{1 6 , 4 7 4}$ | $\mathbf{1 0 , 7 8 3}$ | $\mathbf{6 , 1 8 5}$ |
| 21,318 | $\mathbf{1 5 , 0 5 9}$ | $\mathbf{9 , 3 3 6}$ | $\mathbf{6 , 1 3 0}$ |

Table 33

## The Pilbara Craton in Western Australia

According to the article the rock formation is 3,200 million years old. ${ }^{57}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{58}$ through Isoplot we see that the dates vary from 2,000 to over 8,000 million years old [Table 34]. In Table 35 we can see the maximum ages for the Thorium/Lead dating method.

Thorium/Lead - Ages Summary

| Average | $\mathbf{4 , 8 5 3}$ |
| :---: | :---: |
| Maximum | $\mathbf{8 , 7 2 8}$ |
| Minimum | $\mathbf{2 , 7 9 2}$ |
| Std Deviation | $\mathbf{1 , 0 4 0}$ |

Table 34
Thorium/Lead - Maximum Ages

| Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{8 , 7 2 8}$ | $\mathbf{6 , 2 4 1}$ | $\mathbf{5 , 7 2 1}$ | $\mathbf{5 , 4 3 0}$ | $\mathbf{5 , 0 5 8}$ |
| $\mathbf{8 , 2 9 6}$ | $\mathbf{6 , 1 9 1}$ | $\mathbf{5 , 6 4 3}$ | $\mathbf{5 , 4 1 7}$ | $\mathbf{5 , 0 4 2}$ |
| $\mathbf{7 , 0 1 7}$ | $\mathbf{6 , 0 7 6}$ | $\mathbf{5 , 5 7 8}$ | $\mathbf{5 , 2 8 8}$ | $\mathbf{5 , 0 3 2}$ |
| $\mathbf{6 , 4 3 3}$ | $\mathbf{5 , 7 8 6}$ | $\mathbf{5 , 5 3 3}$ | $\mathbf{5 , 1 7 1}$ | $\mathbf{5 , 0 2 7}$ |
| $\mathbf{6 , 4 3 1}$ | $\mathbf{5 , 7 5 9}$ | $\mathbf{5 , 5 2 2}$ | $\mathbf{5 , 1 3 8}$ | $\mathbf{4 , 9 9 9}$ |

Table 35

If we run another set of $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{59}$ through Isoplot we see that the dates vary from 500 to over 17,000 million years old [Table 36]. In Table 37 we can see the maximum ages for the Thorium/Lead dating method.

Uranium/Thorium/Lead - Ages Summary

| Dating | 207Pb/235U | 206Pb/238U | 208Pb/232Th |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | $\mathbf{2 , 9 5 5}$ | $\mathbf{2 , 9 5 6}$ | $\mathbf{6 , 2 8 6}$ |
| Maximum | $\mathbf{4 , 2 2 0}$ | $\mathbf{8 , 0 7 3}$ | $\mathbf{1 7 , 5 0 0}$ |
| Minimum | $\mathbf{1 , 9 2 1}$ | $\mathbf{1 , 0 7 4}$ | $\mathbf{5 3 5}$ |
| Std Deviation | $\mathbf{3 9 2}$ | $\mathbf{1 , 0 1 9}$ | $\mathbf{3 , 1 9 6}$ |

Table 36

Thorium/Lead - Maximum Ages

| thorium/Lead - Maximum Ages |  |  |  |
| :---: | :---: | :---: | :---: |
| Age | Age | Age | Age |
| $\mathbf{1 7 , 5 0 0}$ | $\mathbf{8 , 8 9 1}$ | $\mathbf{7 , 4 9 3}$ | $\mathbf{5 , 7 4 3}$ |
| $\mathbf{1 3 , 2 5 9}$ | $\mathbf{8 , 7 6 8}$ | $\mathbf{7 , 4 4 3}$ | $\mathbf{5 , 5 9 4}$ |
| $\mathbf{1 3 , 1 0 0}$ | $\mathbf{8 , 6 8 9}$ | $\mathbf{7 , 3 6 8}$ | $\mathbf{5 , 5 1 2}$ |
| $\mathbf{1 2 , 8 2 1}$ | $\mathbf{8 , 3 4 3}$ | $\mathbf{7 , 3 4 3}$ | $\mathbf{5 , 5 1 2}$ |
| $\mathbf{1 2 , 6 6 2}$ | $\mathbf{8 , 3 2 0}$ | $\mathbf{7 , 2 4 0}$ | $\mathbf{5 , 4 5 5}$ |
| $\mathbf{1 2 , 2 1 2}$ | $\mathbf{8 , 2 4 7}$ | $\mathbf{7 , 1 9 2}$ | $\mathbf{5 , 4 3 2}$ |
| $\mathbf{1 1 , 1 6 3}$ | $\mathbf{8 , 2 3 2}$ | $\mathbf{7 , 1 4 8}$ | $\mathbf{5 , 2 5 5}$ |
| $\mathbf{1 0 , 9 5 9}$ | $\mathbf{8 , 1 9 7}$ | $\mathbf{7 , 0 4 7}$ | $\mathbf{5 , 2 5 3}$ |
| $\mathbf{1 0 , 7 8 3}$ | $\mathbf{8 , 0 6 4}$ | $\mathbf{6 , 4 7 8}$ | $\mathbf{5 , 2 2 9}$ |
| $\mathbf{1 0 , 6 6 8}$ | $\mathbf{8 , 0 1 3}$ | $\mathbf{6 , 2 7 0}$ | $\mathbf{5 , 1 5 4}$ |
| $\mathbf{1 0 , 3 8 4}$ | $\mathbf{7 , 9 4 9}$ | $\mathbf{6 , 1 9 9}$ | $\mathbf{5 , 1 4 8}$ |
| $\mathbf{9 , 9 4 5}$ | $\mathbf{7 , 9 4 7}$ | $\mathbf{6 , 1 5 2}$ | $\mathbf{5 , 1 3 5}$ |
| $\mathbf{9 , 5 8 0}$ | $\mathbf{7 , 8 6 1}$ | $\mathbf{6 , 0 8 3}$ | $\mathbf{5 , 1 1 5}$ |
| $\mathbf{9 , 1 2 4}$ | $\mathbf{7 , 7 0 2}$ | $\mathbf{6 , 0 5 2}$ | $\mathbf{5 , 0 4 7}$ |
| $\mathbf{8 , 9 0 8}$ | $\mathbf{7 , 6 9 2}$ | $\mathbf{5 , 8 8 5}$ | $\mathbf{5 , 0 3 3}$ |
| $\mathbf{8 , 9 0 5}$ | $\mathbf{7 , 6 1 2}$ | $\mathbf{5 , 8 0 3}$ | $\mathbf{4 , 8 8 9}$ |

Table 37

## Timing of Sedimentation, Metamorphism, and Plutonism

According to the article the rock formation is 478 million years old. ${ }^{60}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{61}$ through Isoplot we see that the dates vary from 500 to over 80,000 million years old [Table 38]. In Table 39 we can see the maximum ages for the Thorium/Lead dating method.

Thorium/Lead - Ages Summary

| Average | $\mathbf{1 9 , 5 3 9}$ |
| :---: | :---: |
| Maximum | $\mathbf{8 0 , 5 3 2}$ |
| Minimum | $\mathbf{4 8 9}$ |
| Std Deviation | $\mathbf{2 7 , 2 6 0}$ |

Table 38
Thorium/Lead - Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{8 0 , 5 3 2}$ | $\mathbf{6 6 , 4 4 8}$ | $\mathbf{5 1 , 8 7 9}$ | $\mathbf{2 4 , 6 0 4}$ |
| $\mathbf{7 4 , 0 1 6}$ | $\mathbf{6 5 , 0 7 6}$ | $\mathbf{5 1 , 7 5 1}$ | $\mathbf{1 6 , 8 0 9}$ |
| $\mathbf{7 0 , 7 1 3}$ | $\mathbf{6 5 , 0 0 0}$ | $\mathbf{5 1 , 5 4 5}$ | $\mathbf{1 5 , 7 4 8}$ |
| $\mathbf{6 9 , 0 5 7}$ | $\mathbf{6 1 , 3 4 2}$ | $\mathbf{3 4 , 7 6 6}$ | $\mathbf{1 5 , 3 6 5}$ |
| $\mathbf{6 8 , 8 3 1}$ | $\mathbf{6 0 , 3 3 5}$ | $\mathbf{3 1 , 0 4 5}$ | $\mathbf{1 3 , 3 8 4}$ |
| $\mathbf{6 8 , 5 0 3}$ | $\mathbf{5 8 , 3 6 4}$ | $\mathbf{2 8 , 3 9 7}$ | $\mathbf{1 1 , 9 4 5}$ |
| $\mathbf{6 7 , 6 7 2}$ | $\mathbf{5 6 , 7 9 2}$ | $\mathbf{2 4 , 7 3 3}$ | $\mathbf{9 , 4 7 7}$ |

Table 39

## U-Th and U-Pb Systematics in Zircons

According to the article: "At Taupo, the zircon model ages range from $<20$ ka to $>500 \mathrm{Ma}$. ." ${ }^{62}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{63}$ through Isoplot we see that the dates vary from 11,000 to over 41,000 million years old [Table 40]. In Table 41 we can see the maximum ages for the Thorium/Lead dating method.
Thorium/Lead - Ages Summary

| Average | $\mathbf{2 2 , 8 4 7}$ |
| :---: | :---: |
| Maximum | $\mathbf{4 1 , 4 6 0}$ |
| Minimum | $\mathbf{1 1 , 3 9 0}$ |
| Std Deviation | $\mathbf{6 , 1 9 1}$ |

Table 40
Thorium/Lead - Maximum Ages

| Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| 41,460 | 26,447 | 23,441 | 21,348 | $\mathbf{1 8 , 5 3 4}$ |
| $\mathbf{3 4 , 8 2 4}$ | 25,988 | 23,025 | 20,730 | $\mathbf{1 8 , 1 4 0}$ |
| $\mathbf{3 3 , 3 9 2}$ | $\mathbf{2 5 , 5 2 5}$ | $\mathbf{2 2 , 7 0 4}$ | $\mathbf{1 9 , 9 7 7}$ | $\mathbf{1 7 , 7 0 1}$ |
| 29,182 | 24,858 | 22,560 | $\mathbf{1 9 , 9 5 0}$ | $\mathbf{1 7 , 3 5 7}$ |
| 29,126 | 24,325 | $\mathbf{2 2 , 4 9 3}$ | $\mathbf{1 9 , 7 3 8}$ | $\mathbf{1 6 , 4 5 5}$ |
| 28,671 | 24,160 | 22,138 | $\mathbf{1 9 , 4 2 2}$ | $\mathbf{1 6 , 2 2 1}$ |
| 27,733 | 23,992 | 21,885 | $\mathbf{1 9 , 3 6 0}$ | $\mathbf{1 5 , 7 2 6}$ |
| 27,587 | 23,665 | 21,877 | $\mathbf{1 9 , 3 0 7}$ | $\mathbf{1 5 , 3 0 1}$ |
| 26,533 | 23,448 | 21,390 | $\mathbf{1 9 , 0 2 4}$ | $\mathbf{1 1 , 3 9 0}$ |

Table 41

## Hydrothermal Zebra Dolomite

According to the article the rock formation is 416 million years old. ${ }^{64}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{65}$ through Isoplot we see that the dates vary from 6,000 to over 55,000 million years old [Table 42]. In Table 43 we can see the maximum ages for the Thorium/Lead dating method.

Uranium/Thorium/Lead - Ages Summary

| Dating | Pb206/U238 | Pb208/Th232 | Pb207/Pb206 |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | $\mathbf{1 1 , 3 5 3}$ | $\mathbf{1 7 , 1 9 3}$ | $\mathbf{4 , 9 3 3}$ |
| Maximum | $\mathbf{2 3 , 4 2 1}$ | $\mathbf{5 5 , 1 1 0}$ | $\mathbf{4 , 9 9 7}$ |
| Minimum | $\mathbf{1 , 7 1 5}$ | $\mathbf{6 , 1 3 0}$ | $\mathbf{4 , 7 9 9}$ |
| Std Deviation | $\mathbf{5 , 0 5 5}$ | $\mathbf{1 1 , 4 5 9}$ | $\mathbf{5 3}$ |

Table 42

Thorium/Lead - Maximum Ages

| Age | Age |
| :---: | :---: |
| $\mathbf{5 5 , 1 1 0}$ | $\mathbf{1 4 , 7 7 9}$ |
| 29,742 | $\mathbf{1 3 , 3 7 4}$ |
| 27,889 | $\mathbf{1 1 , 9 5 1}$ |
| 27,051 | $\mathbf{1 0 , 7 8 3}$ |
| 21,318 | $\mathbf{9 , 3 3 6}$ |
| 19,224 | $\mathbf{8 , 6 4 4}$ |
| 18,091 | $\mathbf{8 , 0 5 8}$ |
| $\mathbf{1 7 , 9 4 4}$ | $\mathbf{6 , 7 2 1}$ |
| 16,474 | $\mathbf{6 , 1 8 5}$ |
| $\mathbf{1 5 , 0 5 9}$ | $\mathbf{6 , 1 3 0}$ |

## Table 43

If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{65}$ in the second spreadsheet table through Isoplot we see that the dates vary from 6,000 to over 270,000 million years old [Table 44]. In Table 45 we can see the maximum ages for the Thorium/Lead dating method.

Thorium/Lead - Ages Summary

| Average | $\mathbf{9 0 , 6 9 0}$ |
| :---: | :---: |
| Maximum | 277,727 |
| Minimum | $\mathbf{6 , 6 4 3}$ |
| Std Deviation | $\mathbf{4 7 , 2 0 9}$ |
| Table 44 |  |

Thorium/Lead - Maximum Ages

| Billion Years | Quantity | Billion Years | Quantity |
| :---: | :---: | :---: | :---: |
| 0 To 20 | 2 | 130 To 140 | 6 |
| 20 To 30 | 1 | 140 To 150 | 6 |
| 30 To 40 | 22 | 150 To 160 | 2 |
| 40 To 50 | 19 | 160 To 170 | 6 |
| 50 To 60 | 33 | 170 To 180 | 1 |
| 60 To 70 | 17 | 180 To 190 | 5 |
| 70 To 80 | 23 | 190 To 200 | 1 |
| 80 To 90 | 18 | 200 To 210 | 3 |
| 90 To 100 | 14 | 210 To 220 | 1 |
| 100 To 110 | 18 | 220 To 230 | 2 |
| 110 To 120 | 21 | 240 To 250 | 1 |
| 120 To 130 | 13 | 270 To 280 | 2 |

## Table 45

## Origin of Indian Ocean Seamount Province

According to the article the rock formation is 6 million years old. ${ }^{66}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{67}$ through Isoplot we see that the dates vary from 2,000 to over 28,000 million years old [Table 46]. In Table 47 we can see the maximum ages for the Thorium/Lead dating method.

Uranium/Thorium/Lead - Ages Summary

| Dating | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th |
| :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age |
| Average | 5,015 | 5,191 | 7,740 |
| Maximum | 5,087 | 18,210 | 28,677 |
| Minimum | 4,921 | 890 | $\mathbf{1 , 9 4 3}$ |
| Std Deviation | 48 | 3,634 | 4,590 |

Table 46

Thorium/Lead - Maximum Ages

| Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 8 , 6 7 7}$ | $\mathbf{1 0 , 7 1 9}$ | $\mathbf{9 , 5 1 5}$ | $\mathbf{7 , 9 2 3}$ | $\mathbf{6 , 5 1 2}$ |
| $\mathbf{1 2 , 8 2 9}$ | $\mathbf{1 0 , 6 2 6}$ | $\mathbf{9 , 5 0 6}$ | $\mathbf{7 , 6 6 9}$ | $\mathbf{6 , 3 3 3}$ |
| $\mathbf{1 2 , 0 2 8}$ | $\mathbf{1 0 , 4 2 5}$ | $\mathbf{9 , 1 4 6}$ | $\mathbf{7 , 4 0 7}$ | $\mathbf{6 , 1 9 9}$ |
| $\mathbf{1 1 , 7 9 8}$ | $\mathbf{1 0 , 3 7 8}$ | $\mathbf{9 , 0 7 3}$ | $\mathbf{7 , 3 8 0}$ | $\mathbf{6 , 1 9 8}$ |
| $\mathbf{1 1 , 5 5 2}$ | $\mathbf{1 0 , 2 4 0}$ | $\mathbf{9 , 0 1 9}$ | $\mathbf{7 , 3 8 0}$ | $\mathbf{6 , 0 8 5}$ |
| $\mathbf{1 1 , 3 1 7}$ | $\mathbf{1 0 , 2 0 1}$ | $\mathbf{8 , 9 1 6}$ | $\mathbf{7 , 3 6 7}$ | $\mathbf{6 , 0 5 1}$ |
| $\mathbf{1 1 , 1 1 3}$ | $\mathbf{1 0 , 0 8 2}$ | $\mathbf{8 , 2 9 8}$ | $\mathbf{7 , 0 3 0}$ | $\mathbf{5 , 9 9 9}$ |
| $\mathbf{1 0 , 7 7 3}$ | $\mathbf{1 0 , 0 5 5}$ | $\mathbf{8 , 1 1 1}$ | $\mathbf{6 , 9 1 0}$ | $\mathbf{5 , 4 9 3}$ |
| $\mathbf{1 0 , 7 2 5}$ | $\mathbf{9 , 6 7 8}$ | $\mathbf{8 , 0 0 1}$ | $\mathbf{6 , 6 5 1}$ | $\mathbf{5 , 4 1 8}$ |

Table 47

## Geochemistry Geophysics Geosystems

According to the article the rock formation is 100 million years old. ${ }^{68}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{68}$ through Isoplot we see that the dates vary from 5,000 to over 82,000 million years old [Table 48]. In Table 49 we can see the maximum ages for the Thorium/Lead dating method.

| Uranium/Thorium/Lead - Ages Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dating | 206Pb/238U | 207Pb/235U | 207Pb/206Pb | 208Pb/232Th |
| Summary | Age | Age | Age | Age |
| Average | $\mathbf{1 5 , 3 4 5}$ | $\mathbf{7 , 0 1 9}$ | $\mathbf{4 , 9 3 6}$ | $\mathbf{3 9 , 0 6 8}$ |
| Maximum | $\mathbf{3 8 , 3 4 0}$ | $\mathbf{1 0 , 8 7 2}$ | 5,043 | $\mathbf{8 2 , 8 6 5}$ |
| Minimum | $\mathbf{3 , 1 2 5}$ | $\mathbf{4 , 3 8 5}$ | $\mathbf{4 , 7 6 0}$ | $\mathbf{5 , 5 7 7}$ |
| Std Deviation | $\mathbf{9 , 6 5 7}$ | $\mathbf{1 , 7 5 0}$ | $\mathbf{6 3}$ | $\mathbf{2 7 , 3 9 0}$ |
| Table 48 |  |  |  |  |

Table 48
Thorium/Lead - Maximum Ages

| Age | Age | Age |
| :---: | :---: | :---: |
| $\mathbf{8 2 , 8 6 5}$ | $\mathbf{5 1 , 8 2 1}$ | $\mathbf{1 6 , 4 1 7}$ |
| $\mathbf{8 1 , 0 6 5}$ | $\mathbf{4 5 , 6 0 8}$ | $\mathbf{7 , 5 1 2}$ |
| $\mathbf{7 5 , 6 4 4}$ | $\mathbf{4 5 , 0 3 5}$ | $\mathbf{6 , 8 4 0}$ |
| $\mathbf{7 2 , 8 3 3}$ | $\mathbf{4 2 , 2 3 3}$ | $\mathbf{6 , 6 2 6}$ |


| $\mathbf{6 4 , 3 9 3}$ | $\mathbf{3 9 , 0 1 9}$ | $\mathbf{6 , 3 2 2}$ |
| :---: | :---: | :---: |
| $\mathbf{5 8 , 2 4 0}$ | $\mathbf{2 7 , 5 6 2}$ | $\mathbf{5 , 5 7 9}$ |
| $\mathbf{5 7 , 3 3 4}$ | $\mathbf{2 3 , 5 7 1}$ | $\mathbf{5 , 5 7 7}$ |
| $\mathbf{5 6 , 6 4 0}$ | $\mathbf{1 9 , 8 3 4}$ |  |

Table 49

## Continental Lithospheric Contribution

According to the article the rock formation is 72 million years old. ${ }^{69}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{69}$ through Isoplot we see that the dates vary from 5,000 to over 82,000 million years old [Table 50]. In Table 51 we can see the maximum ages for the Thorium/Lead dating method.

Dating Methods - Ages Summary

| Dating | 207Pb/206Pb | 208Pb/232Th | 206Pb/238U | 87Rb/86Sr |
| :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age |
| Average | 4,920 | 6,126 | 4,539 | -47 |
| Maximum | 4,949 | 10,084 | 7,723 | 0 |
| Minimum | 4,894 | 2,616 | 2,306 | -75 |
| Difference | 55 | 7,467 | 5,417 | 75 |

$\xrightarrow{\text { Thorium/Lead - Maximum Ages }}$

| Age |
| :---: |
| $\mathbf{1 0 , 0 8 4}$ |
| $\mathbf{9 , 3 2 0}$ |
| $\mathbf{8 , 1 0 1}$ |
| $\mathbf{7 , 5 0 2}$ |
| $\mathbf{7 , 0 8 0}$ |
| $\mathbf{6 , 8 9 1}$ |
| $\mathbf{6 , 6 5 5}$ |
| $\mathbf{6 , 3 1 3}$ |
| $\mathbf{5 , 8 3 0}$ |
| $\mathbf{5 , 7 5 5}$ |
| $\mathbf{5 , 0 2 9}$ |

Table 51

## Cenozoic Volcanic Rocks of Eastern China

According to the article the rock formation is Quaternary in age. ${ }^{70}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{71}$ through Isoplot we see that the dates vary from 4,000 to over 17,000 million years old [Table 52]. In Table 53 we can see the maximum ages for the Thorium/Lead dating method.

Dating Methods - Ages Summary

| Table | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ | $\mathbf{8 7 R b} / \mathbf{8 6 S r}$ |
| :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age |
| Average | $\mathbf{5 , 0 5 7}$ | $\mathbf{5 , 2 9 6}$ | $\mathbf{1 0 , 5 8 9}$ | $\mathbf{- 1 , 5 0 2}$ |
| Maximum | $\mathbf{5 , 1 2 0}$ | $\mathbf{8 , 5 8 4}$ | $\mathbf{1 7 , 1 7 1}$ | $\mathbf{0}$ |


| Minimum | $\mathbf{5 , 0 0 2}$ | $\mathbf{1 , 1 3 6}$ | $\mathbf{4 , 0 4 2}$ | $\mathbf{- 3 , 5 9 3}$ |
| :---: | :---: | :---: | :---: | :---: |
| Difference | 118 | 7,448 | 13,129 | $\mathbf{3 , 5 9 3}$ |

Table 52

Thorium/Lead - Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 7 , 1 7 1}$ | $\mathbf{1 3 , 3 2 2}$ | $\mathbf{9 , 7 3 7}$ | $\mathbf{7 , 9 6 8}$ |
| $\mathbf{1 5 , 3 4 3}$ | $\mathbf{1 3 , 2 0 2}$ | $\mathbf{9 , 7 0 7}$ | $\mathbf{7 , 8 3 0}$ |
| $\mathbf{1 5 , 2 9 9}$ | $\mathbf{1 3 , 0 0 1}$ | $\mathbf{9 , 0 4 9}$ | $\mathbf{7 , 2 5 0}$ |
| $\mathbf{1 5 , 1 3 6}$ | $\mathbf{1 1 , 1 1 9}$ | $\mathbf{8 , 4 2 0}$ | $\mathbf{6 , 9 7 2}$ |
| $\mathbf{1 5 , 0 5 4}$ | $\mathbf{1 0 , 8 7 3}$ | $\mathbf{8 , 4 1 9}$ | $\mathbf{6 , 6 2 8}$ |
| $\mathbf{1 3 , 4 7 6}$ | $\mathbf{1 0 , 7 5 8}$ | $\mathbf{8 , 3 6 8}$ | $\mathbf{6 , 5 7 7}$ |

Table 53

## $\mathrm{Sr}, \mathrm{Nd}$, and Pb isotopes

According to the article the rock formation is 2,900 million years. ${ }^{72}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{73}$ through Isoplot we see that the dates vary from 79 to over 94,000 million years old [Table 54]. In Table 55 we can see the maximum ages for the Thorium/Lead dating method.

| Uranium/Thorium/Lead - Ages Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Dating | 232Th/208Pb | 206Pb/238U | 207Pb/206Pb |
| Summaries | Age | Age | Age |
| Average | 14,198 | 7,366 | 5,014 |
| Maximum | 94,396 | 22,201 | 5,077 |
| Minimum | 79 | 1,117 | 4,945 |
| Difference | 94,317 | 21,083 | 131 |
| Table 54 |  |  |  |

Table 54

Thorium/Lead - Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{9 4 , 3 9 6}$ | $\mathbf{3 9 , 2 6 7}$ | $\mathbf{1 0 , 5 9 5}$ | $\mathbf{8 , 1 7 1}$ |
| $\mathbf{9 0 , 6 8 3}$ | $\mathbf{2 6 , 2 6 6}$ | $\mathbf{1 0 , 2 8 4}$ | $\mathbf{7 , 7 8 9}$ |
| $\mathbf{7 4 , 6 3 9}$ | $\mathbf{1 8 , 3 3 4}$ | $\mathbf{9 , 3 2 8}$ | $\mathbf{7 , 6 3 8}$ |
| $\mathbf{5 8 , 1 5 3}$ | $\mathbf{1 6 , 3 5 7}$ | $\mathbf{8 , 8 2 1}$ | $\mathbf{7 , 3 7 5}$ |
| $\mathbf{5 5 , 3 2 4}$ | $\mathbf{1 4 , 2 5 0}$ | $\mathbf{8 , 7 7 1}$ | $\mathbf{7 , 3 1 7}$ |
| $\mathbf{4 5 , 2 4 2}$ | $\mathbf{1 1 , 2 1 5}$ | $\mathbf{8 , 4 0 3}$ | $\mathbf{5 , 7 5 9}$ |

Table 55

## An Extremely low U/Pb Source

According to the article: "The Rb-Sr data yield an internal isochron age of $3,840 \pm 32$ Ma." ${ }^{74}$ If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{75}$ through Isoplot we see that the dates vary from 5,000 to over 13,000 million years old [Table 56]. In Table 57 we can see the maximum ages for the Thorium/Lead dating method.

Uranium/Thorium/Lead - Ages Summary

| Table | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | 208Pb/232Th | $207 \mathrm{~Pb} / 235 \mathrm{U}$ | 87Rb/86Sr |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age | Age |


| Average | $\mathbf{4 , 6 7 3}$ | $\mathbf{8 , 0 3 5}$ | $\mathbf{1 0 , 1 4 8}$ | $\mathbf{4 , 5 4 6}$ | $\mathbf{3 , 6 1 9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum | $\mathbf{5 , 0 1 8}$ | $\mathbf{5 6 , 9 2 3}$ | $\mathbf{6 5 , 2 8 6}$ | $\mathbf{8 , 1 2 8}$ | $\mathbf{5 , 3 8 5}$ |
| Minimum | $\mathbf{3 , 9 6 1}$ | $\mathbf{1 , 4 7 7}$ | $\mathbf{2 , 5 4 2}$ | $\mathbf{2 , 7 8 4}$ | $\mathbf{7 2 1}$ |
| Difference | $\mathbf{1 , 0 5 7}$ | $\mathbf{5 5 , 4 4 5}$ | $\mathbf{6 2 , 7 4 4}$ | $\mathbf{5 , 3 4 4}$ | $\mathbf{4 , 6 6 4}$ |

Table 56
Thorium/Lead - Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{6 5 , 2 8 6}$ | $\mathbf{1 4 , 4 3 0}$ | $\mathbf{9 , 0 9 4}$ | $\mathbf{5 , 4 0 1}$ |
| $\mathbf{3 3 , 8 9 8}$ | $\mathbf{1 4 , 4 1 0}$ | $\mathbf{6 , 5 2 0}$ | $\mathbf{5 , 3 9 6}$ |
| $\mathbf{2 5 , 0 1 3}$ | $\mathbf{1 3 , 1 0 7}$ | $\mathbf{6 , 1 6 6}$ | $\mathbf{5 , 3 6 5}$ |
| 22,178 | $\mathbf{1 2 , 7 3 8}$ | $\mathbf{6 , 1 2 1}$ | $\mathbf{5 , 0 9 8}$ |
| 21,204 | $\mathbf{1 1 , 6 4 1}$ | $\mathbf{5 , 6 7 1}$ | $\mathbf{5 , 0 3 5}$ |
| $\mathbf{1 7 , 6 1 1}$ | $\mathbf{1 1 , 1 7 4}$ | $\mathbf{5 , 4 0 8}$ | $\mathbf{4 , 6 7 8}$ |

Table 57

## Petrogenesis and Origins of Mid-Cretaceous

According to the article: "The basal lava flow displays a sharp contact with the underlying terrestrial sediments, which in turn rest on shallow marine sediments of Ngaterian age (100.2-95.2Ma)." ${ }^{76}$ If we run the $\mathrm{Rb} / \mathrm{Sr}$ ratios ${ }^{77}$ through Microsoft Excel we see that the dates vary from 15 to 85 million years old [Table 58]. If we run the $\mathrm{Pb} / \mathrm{Th}$ ratios ${ }^{78}$ through Isoplot we see that the dates vary from 4,000 to over 10,000 million years old [Table 58]. In Table 59 we can see the maximum ages for the Thorium/Lead dating method.

Dating Methods - Ages Summary

| Table | 207Pb/206Pb | 207Pb/235U | 87Rb/86Sr | 208Pb/232Th | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age | Age |
| Average | $\mathbf{4 , 8 7 6}$ | $\mathbf{4 , 4 1 6}$ | $\mathbf{5 9}$ | $\mathbf{6 , 3 3 3}$ | $\mathbf{3 , 5 1 5}$ |
| Maximum | $\mathbf{4 , 9 4 5}$ | $\mathbf{5 , 1 5 9}$ | $\mathbf{8 5}$ | $\mathbf{1 0 , 7 1 6}$ | $\mathbf{5 , 7 1 7}$ |
| Minimum | $\mathbf{4 , 8 3 6}$ | $\mathbf{4 , 0 8 8}$ | $\mathbf{1 5}$ | $\mathbf{4 , 7 8 5}$ | $\mathbf{2 , 7 1 2}$ |
| Difference | 109 | $\mathbf{1 , 0 7 1}$ | $\mathbf{7 0}$ | 5,931 | $\mathbf{3 , 0 0 5}$ |

Table 58

Thorium/Lead - Maximum Ages

| Age | Age | Age |
| :---: | :---: | :---: |
| 10,716 | 6,355 | $\mathbf{5 , 6 5 5}$ |
| 7,520 | 6,354 | 5,598 |
| 7,259 | 6,138 | 5,519 |
| 7,145 | $\mathbf{6 , 0 3 2}$ | 5,515 |
| 6,559 | 5,972 | 5,505 |
| $\mathbf{6 , 5 1 1}$ | 5,972 | 5,210 |
| Table 59 |  |  |

## Conclusion

If we use the standard formula ${ }^{79}$ for calculating $\mathrm{Rb} / \mathrm{Sr}$ ages we find on many occasions that the Uranium/Thorium/Lead dates are all wrong! Evolutionist Brent Dalrymple states:
"Several events in the formation of the Solar System can be dated with considerable precision." ${ }^{80}$
Looking at some of the dating it is obvious that precision is much lacking. He then goes on:
"Biblical chronologies are historically important, but their credibility began to erode in the eighteenth and nineteenth centuries when it became apparent to some that it would be more profitable to seek a realistic age for the Earth through observation of nature than through a literal interpretation of parables." ${ }^{81}$

I his book he gives a table ${ }^{82}$ with radiometric dates of twenty meteorites. If you run the figures through Microsoft Excel, you will find that they are $98.7 \%$ in agreement. There is only a seven percent difference between the ratio of the smallest and oldest dates. As we have seen in this essay, such a perfect fit is attained by selecting data and ignoring other data. A careful study of the latest research shows that such perfection is illusionary at best.

Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary. The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data in Dalrymple's book is selectively taken to suit and ignores data to the contrary.

## References

Mathematical Calculations and hyperlinks to the Adobe Acrobat files of each of the Geology Magazine
articles cited are on the following Microsoft Excel Spreadsheets:

Geo_Dating\Rubidium\Rubidium_Strontium.xlsm<br>Geo_Dating\Lead_206_207\Master_Index.xlsm

## Install Isoplot Version 4 to make the formulas work http://www.bgc.org/isoplot_etc/isoplot.html

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# The Uranium 235 Dating Method <br> By Paul Nethercott <br> August 2013 

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

If we run the isotopic ratios give in standard geology magazines through the computer program Isoplot ${ }^{7}$ we find that the Uranium/Thorium/Lead isotopic ratios in the rocks disagree radically with the Rubidium/Strontium ages. The $\mathrm{U} / \mathrm{Th} / \mathrm{Pb}$ ratios give ages older than the evolutionist age of the Earth, Solar System, Galaxy and Universe. How can Earth rocks be dated as being older than the Big Bang?

If we use isotopic formulas ${ }^{8-11}$ given in standard geology text we can arrive at ages from the $\mathrm{Rb} / \mathrm{Sr}$ and $\mathrm{Nd} / \mathrm{Sm}$ ratios. The formula for $\mathrm{Rb} / \mathrm{Sr}$ age is given as:
$t=\frac{2.303}{\lambda} \log \left(\frac{(87 S r / 86 S r)-(87 S r / 86 S r)_{0}}{(87 R b / 86 S r)}+1\right)$

Where t equals the age in years. $\lambda$ equals the decay constant. ( $87 \mathrm{Sr} / 86 \mathrm{Sr}$ ) $=$ the current isotopic ratio. $(87 \mathrm{Sr} / 86 \mathrm{Sr})_{0}=$ the initial isotopic ratio. $(87 \mathrm{Rb} / 86 \mathrm{Sr})=$ the current isotopic ratio. The same is true for the formula below.
$t=\frac{2.303}{\lambda} \log \left(\frac{(143 N d / 144 N d)-(143 N d / 144 N d)_{0}}{(147 S m / 144 N d)}+1\right)$
Here are examples of isotopic ratios taken from several articles in major geology magazines which give absolutely absurd dates.

## Petrogenesis of the Flood Basalts

According to the article ${ }^{12}$ this basalt form the Northern Kerguelen Archipelago was dated in 1998 by scientists from the Massachusetts Institute Of Technology, University of Brussels, Belgium and the San Diego State University. According to the essay: "The dominance of this isotopic signature in archipelago lavas for 30 my and its presence in $\sim 40 \mathrm{Ma}$ gabbros is consistent with the previous interpretation that these are isotopic characteristics of the Kerguelen Plume." ${ }^{12}$ Various tables ${ }^{13}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates of over a 44 billion year range! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

| Mount Bureau | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| Summary | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$ | $\mathbf{2 0 7 P b} / 235 \mathrm{U}$ | $\mathbf{2 0 8 P b} / 232 \mathbf{T h}$ |
| Average | $\mathbf{5 , 0 0 6}$ | $\mathbf{5 , 9 2 4}$ | $\mathbf{5 , 1 6 1}$ | $\mathbf{8 , 4 1 0}$ |
| Maximum | $\mathbf{5 , 0 2 0}$ | $\mathbf{2 3 , 3 6 6}$ | $\mathbf{8 , 4 9 6}$ | $\mathbf{4 4 , 3 7 8}$ |
| Minimum | $\mathbf{4 , 9 9 4}$ | $\mathbf{3 , 3 3 5}$ | $\mathbf{4 , 4 5 4}$ | $\mathbf{2 , 6 5 0}$ |
| Difference | $\mathbf{2 6}$ | $\mathbf{2 0 , 0 3 1}$ | $\mathbf{4 , 0 4 2}$ | $\mathbf{4 1 , 7 2 8}$ |


| Mt. Rabouillere | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: |
| Summary | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$ | $\mathbf{2 0 7 P b} / \mathbf{2 3 5 U}$ | $\mathbf{2 0 8 P b} / \mathbf{2 3 2 T h}$ |
| Average | $\mathbf{5 , 0 0 8}$ | $\mathbf{4 , 9 0 3}$ | $\mathbf{4 , 9 7 5}$ | $\mathbf{6 , 1 4 2}$ |
| Maximum | $\mathbf{5 , 0 1 9}$ | $\mathbf{5 , 3 5 5}$ | $\mathbf{5 , 1 0 0}$ | $\mathbf{7 , 7 8 8}$ |
| Minimum | $\mathbf{5 , 0 0 0}$ | $\mathbf{4 , 3 0 5}$ | $\mathbf{4 , 7 9 3}$ | $\mathbf{2 , 7 9 9}$ |
| Difference | $\mathbf{2 0}$ | $\mathbf{1 , 0 5 0}$ | $\mathbf{3 0 7}$ | $\mathbf{4 , 9 8 9}$ |

## Nature of the Source Regions

According to the article ${ }^{14}$ this lava from southern Tibet was dated in 2004 by scientists from the Open University in Milton Keynes, the University of Bristol and Cardiff University. According to the essay: "Most samples are Miocene in age, ranging from 10 to 25 Ma in the south and 19 Ma to the present day in northern Tibet." ${ }^{15}$ Various tables ${ }^{16}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates of over an 88 billion year range! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

| 207Pb/235U Age | Model Age | Ratio | Percentage |
| :---: | :---: | :---: | :---: |
| 5,136 | 0.5 | 10,273 | $10,272,962$ |
| 5,138 | 0.5 | 10,275 | $10,275,154$ |
| 5,135 | 13 | 395 | 395,000 |
| 5,140 | 18.5 | 278 | 277,839 |
| 7,470 | 13 | 575 | 574,597 |
| 7,471 | 12.5 | 598 | 597,649 |


| 207Pb/235U Age | Model Age | Ratio | Percentage |
| :---: | :---: | :---: | :---: |
| 313 | 24.0 | 13 | 13,026 |
| 946 | 13.8 | 69 | 68,534 |
| 266 | 13.8 | 19 | 19,267 |
| 238 | 13.8 | 17 | 17,265 |
| 294 | 13.3 | 22 | 22,095 |
| 447 | 18.8 | 24 | 23,757 |
| 482 | 17.3 | 28 | 27,878 |

## Generation of Palaeocene Adakitic Andesites

According to the article ${ }^{17}$ this rock formation from North Eastern China was dated in 2007 by scientists from China and Japan. According to the essay the true age is: "Palaeocene (c. $55-58 \mathrm{Ma}$ ) adakitic andesites from the Yanji area." ${ }^{17}$ Numerous table and charts affirm this as the true age. ${ }^{18} \mathrm{~A}$ table ${ }^{19}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of over 10 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

| 207Pb/206Pb | 208Pb/232Th | 206Pb/238U | 207Pb/235U |
| :---: | :---: | :---: | :---: |
| Age | Age | Age | Age |
| $\mathbf{5 , 0 2 4}$ | $\mathbf{1 0 , 5 1 8}$ | $\mathbf{9 , 6 6 9}$ | $\mathbf{6 , 0 5 2}$ |
| $\mathbf{5 , 0 2 3}$ | $\mathbf{1 0 , 2 7 7}$ | $\mathbf{9 , 5 5 2}$ | $\mathbf{6 , 0 5 1}$ |
| $\mathbf{5 , 0 2 3}$ | $\mathbf{8 , 5 2 9}$ | $\mathbf{9 , 5 2 6}$ | $\mathbf{6 , 0 5 1}$ |
| 5,023 | $\mathbf{8 , 3 6 0}$ | $\mathbf{8 , 4 4 3}$ | $\mathbf{5 , 8 2 8}$ |
| 5,021 | $\mathbf{8 , 1 6 5}$ | $\mathbf{7 , 9 2 9}$ | $\mathbf{5 , 8 2 6}$ |
| $\mathbf{5 , 0 2 0}$ | $\mathbf{7 , 8 0 0}$ | $\mathbf{7 , 4 0 3}$ | $\mathbf{5 , 6 4 1}$ |

## Ivisaartoq Greenstone Belt

According to the article ${ }^{20}$ this rock formation from southern West Greenland was dated in 2007 by scientists from Canada, Denmark, USA and Austria. According to the essay the true age is: "The Mesoarchean (ca. 3075 Ma ) Ivisaartoq greenstone belt in southern West Greenland." ${ }^{20} \mathrm{~A}$ table ${ }^{21}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of over 3 billion years!

| 207Pb/235U | 208Pb/232Th | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ |
| :---: | :---: | :---: | :---: |
| Age | Age | Age | Age |
| $\mathbf{5 , 2 8 8}$ | $\mathbf{2 , 6 7 1}$ | $\mathbf{2 8 7 6}$ | $\mathbf{3 0 8 2}$ |
| $\mathbf{5 , 1 6 2}$ | $\mathbf{2 , 8 6 0}$ | $\mathbf{2 7 1 2}$ | $\mathbf{2 9 9 8}$ |
| $\mathbf{5 , 2 9 9}$ | $\mathbf{2 , 5 8 6}$ | $\mathbf{2 9 5 5}$ | $\mathbf{3 0 4 6}$ |
| $\mathbf{5 , 4 0 7}$ | $\mathbf{2 , 3 0 5}$ | $\mathbf{3 1 9 5}$ | $\mathbf{3 0 5 9}$ |
| $\mathbf{5 , 3 0 2}$ | $\mathbf{2 , 7 2 6}$ | $\mathbf{2 9 3 0}$ | $\mathbf{3 0 6 7}$ |

## Geophysical Systems

According to the article ${ }^{22}$ this rock formation was dated in 2003. A table ${ }^{23}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of over 82 billion years!

| Dating | 206Pb/238U | 207Pb/235U | 207Pb/206Pb | 208Pb/232Th | 87Rb/86Sr | 147Sm/144Nd |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age | Age | Age | Age |
| Average | $\mathbf{1 5 , 3 4 5}$ | $\mathbf{7 , 0 1 9}$ | $\mathbf{4 , 9 3 6}$ | $\mathbf{3 9 , 0 6 8}$ | $\mathbf{1 0 2}$ | $\mathbf{1 0 2}$ |
| Maximum | $\mathbf{3 8 , 3 4 0}$ | $\mathbf{1 0 , 8 7 2}$ | $\mathbf{5 , 0 4 3}$ | $\mathbf{8 2 , 8 6 5}$ | $\mathbf{1 4 0}$ | $\mathbf{1 4 0}$ |
| Minimum | $\mathbf{3 , 1 2 5}$ | $\mathbf{4 , 3 8 5}$ | $\mathbf{4 , 7 6 0}$ | 5,577 | $\mathbf{7 0}$ | $\mathbf{6 8}$ |
| Std Deviation | $\mathbf{9 , 6 5 7}$ | $\mathbf{1 , 7 5 0}$ | $\mathbf{6 3}$ | $\mathbf{2 7 , 3 9 0}$ | $\mathbf{1 6}$ | $\mathbf{1 7}$ |

## History Of The Pasamonte Achondrite

According to the article this meteorite specimen was dated in 1977 by scientists from the United States Geological Survey, Colorado and the Department of Chemistry and Geochemistry, Colorado School of Mines. ${ }^{24}$ The article states that Rubidium/Strontium dating affirms that this material is 4.5 billion years old. ${ }^{25}$ If we run the various isotope ratios ${ }^{25}$ from two different tables in the article through Microsoft Excel we get the following values respectively:

| Summary | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 235 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 206 \mathrm{~Pb}$ | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{3 , 0 8 8}$ | $\mathbf{3 , 6 6 6}$ | $\mathbf{4 , 5 6 6}$ | $\mathbf{2 , 2 6 3}$ |
| Maximum | $\mathbf{5 , 6 9 4}$ | $\mathbf{5 , 0 3 2}$ | $\mathbf{4 , 9 6 3}$ | $\mathbf{1 4 , 8 0 0}$ |
| Minimum | $\mathbf{1 0 3}$ | $\mathbf{8 6 5}$ | $\mathbf{4 , 4 4 0}$ | $\mathbf{- 1 0 , 7 0 0}$ |
| Difference | $\mathbf{5 , 5 9 1}$ | $\mathbf{4 , 1 6 7}$ | $\mathbf{5 2 3}$ | $\mathbf{2 5 , 5 0 0}$ |

If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{25}$ from the article through Microsoft Excel we get the following values:

| Rb/Sr Age Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{4 , 4 0 3}$ |
| Maximum | $\mathbf{6 , 6 7 4}$ |
| Minimum | $\mathbf{2 , 4 1 2}$ |
| Difference | $\mathbf{4 , 2 6 2}$ |

Table 18
The Thorium/Lead dates are up to twelve billion years older. The so called true age is just a guess.

## An Extremely Low U/Pb Source

According to the article ${ }^{26}$ this specimen [lunar meteorite] was dated in 1993 by scientists from the United States Geological Survey, Colorado, the United States Geological Survey, California and The National Institute of Polar Research, Tokyo. According to the article: "The $\mathrm{Pb}-\mathrm{Pb}$ internal isochron obtained for acid leached residues of separated mineral fractions yields an age of $3940 \pm 28 \mathrm{Ma}$, which is similar to the $\mathrm{U}-\mathrm{Pb}(3850 \pm 150$ $\mathrm{Ma})$ and $\mathrm{Th}-\mathrm{Pb}(3820 \pm 290 \mathrm{Ma})$ internal isochron ages. The $\mathrm{Sm}-\mathrm{Nd}$ data for the mineral separates yield an internal isochron age of $3871 \pm 57 \mathrm{Ma}$ and an initial $143 \mathrm{Nd} / \mathrm{I} 44 \mathrm{Nd}$ value of $0.50797 \pm 10$. The $\mathrm{Rb}-\mathrm{Sr}$ data yield an internal isochron age of $3840 \pm 32 \mathrm{Ma} .{ }^{26}$

| Rb/Sr Age Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{3 , 6 1 9}$ |
| Maximum | $\mathbf{5 , 3 8 5}$ |
| Minimum | $\mathbf{7 2 1}$ |
| Difference | $\mathbf{4 , 6 6 4}$ |

Table 47
Uranium Age Dating Summary

| Table | 207Pb/206Pb | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ | $\mathbf{2 0 7 P b} / \mathbf{2 3 5 U}$ |
| :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age |
| Average | $\mathbf{4 , 6 7 3}$ | $\mathbf{8 , 0 3 5}$ | $\mathbf{1 0 , 1 4 8}$ | $\mathbf{4 , 5 4 6}$ |
| Maximum | $\mathbf{5 , 0 1 8}$ | $\mathbf{5 6 , 9 2 3}$ | $\mathbf{6 5 , 2 8 6}$ | $\mathbf{8 , 1 2 8}$ |
| Minimum | $\mathbf{3 , 9 6 1}$ | $\mathbf{1 , 4 7 7}$ | $\mathbf{2 , 5 4 2}$ | $\mathbf{2 , 7 8 4}$ |
| Difference | $\mathbf{1 , 0 5 7}$ | $\mathbf{5 5 , 4 4 5}$ | $\mathbf{6 2 , 7 4 4}$ | $\mathbf{5 , 3 4 4}$ |

## Table 48

The article claims that the $\mathrm{Rb} / \mathrm{Sr}$ age is 3.8 billion years for this meteorite. If that is the true age why are all the Uranium/Thorium/Lead dates ${ }^{27}$ so stupid? Or are they right and the $\mathrm{Rb} / \mathrm{Sr}^{28}$ is wrong?
208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{6 5 , 2 8 6}$ | $\mathbf{1 4 , 4 3 0}$ | $\mathbf{9 , 0 9 4}$ | $\mathbf{5 , 4 0 1}$ |
| $\mathbf{3 3 , 8 9 8}$ | $\mathbf{1 4 , 4 1 0}$ | $\mathbf{6 , 5 2 0}$ | $\mathbf{5 , 3 9 6}$ |
| $\mathbf{2 5 , 0 1 3}$ | $\mathbf{1 3 , 1 0 7}$ | $\mathbf{6 , 1 6 6}$ | $\mathbf{5 , 3 6 5}$ |
| $\mathbf{2 2 , 1 7 8}$ | $\mathbf{1 2 , 7 3 8}$ | $\mathbf{6 , 1 2 1}$ | $\mathbf{5 , 0 9 8}$ |
| $\mathbf{2 1 , 2 0 4}$ | $\mathbf{1 1 , 6 4 1}$ | $\mathbf{5 , 6 7 1}$ | $\mathbf{5 , 0 3 5}$ |
| $\mathbf{1 7 , 6 1 1}$ | $\mathbf{1 1 , 1 7 4}$ | $\mathbf{5 , 4 0 8}$ | $\mathbf{4 , 6 7 8}$ |
| Table 49 |  |  |  |

206Pb/238U, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 6 , 9 2 3}$ | $\mathbf{1 0 , 8 9 5}$ | $\mathbf{6 , 7 6 4}$ | $\mathbf{5 , 7 7 7}$ |
| 27,313 | $\mathbf{1 0 , 2 7 8}$ | $\mathbf{6 , 6 7 0}$ | $\mathbf{5 , 6 2 5}$ |
| 17,873 | $\mathbf{9 , 6 5 3}$ | $\mathbf{6 , 4 4 9}$ | $\mathbf{5 , 6 0 2}$ |
| 13,680 | $\mathbf{8 , 0 0 9}$ | $\mathbf{6 , 4 3 6}$ | $\mathbf{5 , 2 7 8}$ |
| 13,623 | $\mathbf{7 , 3 9 5}$ | $\mathbf{6 , 0 7 0}$ | $\mathbf{5 , 1 4 7}$ |

Table 50

## Petrogenesis and Origins of Mid-Cretaceous

According to the article ${ }^{-29}$ this specimen from the Intraplate Volcanism in Marlborough, New Zealand was dated in 2010 by scientists from New Zealand. According to the essay: "the intraplate basalts in New Zealand that have been erupted intermittently over the last c. 100 Myr." ${ }^{30}$ Various tables ${ }^{31}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates over a 10 billion year range. None of the Lead based dating methods even come vaguely close to a Cretaceous age.

| Table | 207Pb/206Pb | 207Pb/235U | 87Rb/86Sr | 208Pb/232Th | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age | Age |
| Average | $\mathbf{4 , 8 7 6}$ | $\mathbf{4 , 4 1 6}$ | 59 | $\mathbf{6 , 3 3 3}$ | $\mathbf{3 , 5 1 5}$ |
| Maximum | $\mathbf{4 , 9 4 5}$ | $\mathbf{5 , 1 5 9}$ | $\mathbf{8 5}$ | $\mathbf{1 0 , 7 1 6}$ | $\mathbf{5 , 7 1 7}$ |
| Minimum | $\mathbf{4 , 8 3 6}$ | $\mathbf{4 , 0 8 8}$ | $\mathbf{1 5}$ | $\mathbf{4 , 7 8 5}$ | $\mathbf{2 , 7 1 2}$ |
| Difference | $\mathbf{1 0 9}$ | $\mathbf{1 , 0 7 1}$ | $\mathbf{7 0}$ | $\mathbf{5 , 9 3 1}$ | $\mathbf{3 , 0 0 5}$ |

## U-Th-Pb Dating Of Secondary Minerals

According to the article ${ }^{32}$ this rock formation Yucca Mountain, Nevada was dated in 2008 by scientists from United States Geological Survey, Geological Survey of Canada, and the Australian National University. According to the essay the true age is unknown: "The $\mathrm{U}-\mathrm{Pb}$ system in opal and chalcedony allows dating in the age range from 50 ka to millions of years and older (Ludwig et al., 1980; Neymark et al., 2000, 2002). Recently, the reliability of $\mathrm{U}-\mathrm{Pb}$ dating of opal was questioned." ${ }^{33}$ Other authors have affirmed the same problem. ${ }^{33}$ Two tables ${ }^{34}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 353 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 350,000 times older than the youngest date.

| Age Dating Summary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dating | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 87Rb/86Sr |  |
| Summary | Age | Age | Age | Age |  |
| Average | $\mathbf{3 , 4 5 9}$ | $\mathbf{4 , 8 9 1}$ | $\mathbf{9 , 9 8 4}$ | $\mathbf{1 2}$ |  |
| Maximum | $\mathbf{8 , 1 2 6}$ | 31,193 | $\mathbf{3 5 2 , 9 6 2}$ | $\mathbf{1 3}$ |  |
| Minimum | -445 | 1 | 2 | 11 |  |
| Difference | $\mathbf{8 , 5 7 1}$ | $\mathbf{3 1 , 1 9 2}$ | $\mathbf{3 5 2 , 9 6 0}$ | 2 |  |
| Table 78 |  |  |  |  |  |

Another table ${ }^{35}$ in the essay has a list of calculated dates As we can see below they are all at radical disagreement with each other. There is a spread of dates of 82 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 82,000 times older than the youngest date.

| Age Dating Summary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dating | 206Pb/238U | 207Pb/235U | 208Pb/232Th | 87Rb/86Sr |  |
| Summary | Age | Age | Age | Age |  |
| Average | $\mathbf{1 , 5 4 0}$ | 46 | 7,687 | $\mathbf{1 2}$ |  |
| Maximum | 20,209 | 486 | 82,030 | 13 |  |
| Minimum | 1 | 0 | 3 | 11 |  |
| Difference | $\mathbf{2 0 , 2 0 8}$ | 486 | 82,027 | 2 |  |
| Table 79 |  |  |  |  |  |

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# The Uranium 238 Dating Method <br> By Paul Nethercott <br> July 2013 

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. ${ }^{1}$ Standard evolutionist publications give the age of the universe as 13.75 Billion years. ${ }^{2,3}$

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." ${ }^{4}$ "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{5,6}$

If we run the isotopic ratios give in standard geology magazines through the computer program Isoplot ${ }^{7}$ we find that the Uranium/Thorium/Lead isotopic ratios in the rocks disagree radically other dating methods. The $\mathrm{U} / \mathrm{Th} / \mathrm{Pb}$ ratios give ages older than the evolutionist age of the Earth, Solar System, Galaxy and Universe. How can Earth rocks be dated as being older than the Big Bang? Here are examples of isotopic ratios taken from several articles in major geology magazines which give absolutely absurd dates.

## Rocks Of The Central Wyoming Province

These rock samples were dated in 2005 by scientists from the University of Wyoming. ${ }^{8}$ If we run the Rubidium/Strontium and Neodymium/Samarium isotope ratios ${ }^{9}$ from the article through Microsoft Excel and use the formulas listed in Gunter Faure's book ${ }^{10}$ we get the following values:
$t=\frac{2.303}{(0.693 \div h)} \log \left(\frac{(143 N d / 144 N d)-(143 N d / 144 N d)_{0}}{(144 S m / 147 N d)}+1\right)$
$\mathrm{h}=$ half life, 106 billion years
$t=\frac{2.303}{(0.693 \div h)} \log \left(\frac{(87 S r / 86 S r)-(87 S r / 86 S r)_{0}}{(87 R b / 86 S r)}+1\right)$
$\mathrm{h}=$ half life, 48.8 billion years
Where $t$ equals the age in years. $(87 \mathrm{Sr} / 86 \mathrm{Sr})=$ the current isotopic ratio. $(87 \mathrm{Sr} / 86 \mathrm{Sr})_{0}=$ the initial isotopic ratio. $(87 \mathrm{Rb} / 86 \mathrm{Sr})=$ the current isotopic ratio. The same is true for the formula below

Ages Dating Summary

| Dating | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | 87Rb/86Sr | 147Sm/144Nd | 207Pb/206Pb | 208Pb/232Th | 206Pb/238U |
| Average | 2,863 | 2,869 | 5,123 | $\mathbf{1 7 , 8 9 9}$ | $\mathbf{1 1 , 9 0 6}$ |
| Maximum | 2,952 | 2,954 | 5,294 | $\mathbf{3 8 , 7 4 6}$ | $\mathbf{1 8 , 9 8 5}$ |
| Minimum | 2,630 | 2,631 | 4,662 | $\mathbf{6 , 6 5 0}$ | $\mathbf{7 , 2 9 4}$ |
| Std Deviation | $\mathbf{3 8}$ | $\mathbf{3 9}$ | $\mathbf{1 5 2}$ | $\mathbf{9 , 7 5 4}$ | $\mathbf{3 , 2 9 8}$ |

Table 1

The Uranium/Lead dates ${ }^{11}$ are up to sixteen billion years older than the Rubidium/Strontium and Neodymium/Samarium dates. The Thorium/Lead dates are up to thirty six billion years older. The so called true age is just a guess.

## History Of The Pasamonte Achondrite

According to the article this meteorite specimen was dated in 1977 by scientists from the United States Geological Survey, Colorado and the Department of Chemistry and Geochemistry, Colorado School of Mines. ${ }^{12}$ The article states that Rubidium/Strontium dating affirms that this material is 4.5 billion years old. ${ }^{34}$ If we run the various isotope ratios ${ }^{13}$ from two different tables in the article through Microsoft Excel we get the following values respectively:

U/Th/Pb Age Dating Summary

| Summary | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $207 \mathrm{~Pb} / 235 \mathrm{U}$ | $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ | $208 \mathrm{~Pb} / 232 \mathrm{Th}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average | $\mathbf{3 , 0 8 8}$ | $\mathbf{3 , 6 6 6}$ | $\mathbf{4 , 5 6 6}$ | $\mathbf{2 , 2 6 3}$ |
| Maximum | 5,694 | 5,032 | 4,963 | $\mathbf{1 4 , 8 0 0}$ |
| Minimum | $\mathbf{1 0 3}$ | $\mathbf{8 6 5}$ | $\mathbf{4 , 4 4 0}$ | $\mathbf{- 1 0 , 7 0 0}$ |
| Difference | $\mathbf{5 , 5 9 1}$ | $\mathbf{4 , 1 6 7}$ | $\mathbf{5 2 3}$ | $\mathbf{2 5 , 5 0 0}$ |

Table 2
If we run the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ isotope ratios ${ }^{13}$ from the article through Microsoft Excel we get the following values:

| Rb/Sr Age Dating Summary |  |
| :---: | :---: |
| Average | $\mathbf{4 , 4 0 3}$ |
| Maximum | $\mathbf{6 , 6 7 4}$ |
| Minimum | $\mathbf{2 , 4 1 2}$ |
| Difference | $\mathbf{4 , 2 6 2}$ |

Table 3
The Thorium/Lead dates are up to twelve billion years older. The so called true age is just a guess.

## A Depleted Mantle Source For Kimberlites

According to the article ${ }^{14}$ this specimen [kimberlites from Zaire] was dated in 1984 by scientists from Belgium. According to the article ${ }^{15}$ the age of the samples is 70 million years. If we run the various isotope ratios ${ }^{18}$ from the article through Microsoft Excel we get the following values respectively:

Age Dating Summary

| Age Dating Summary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | 207Pb/206Pb | 206Pb/238U | 87Rb/86Sr | 147Sm/144Nd |  |
| Average | 4,977 | 4,810 | 86 | 72 |  |
| Maximum | 5,017 | 10,870 | 146 | 80 |  |
| Minimum | 4,909 | 1,391 | 50 | 63 |  |
| Difference | 108 | 9,478 | 196 | 17 |  |

Table 4

The $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ maximum age is 34 times older than the $87 \mathrm{Rb} / 86 \mathrm{Sr}$ maximum age. The $206 \mathrm{~Pb} / 238 \mathrm{U}$ maximum age is 74 times older than the $147 \mathrm{Sm} / 144 \mathrm{Nd}$ maximum age. There is a 10.8 billion year difference between the oldest and youngest age attained.

## Pb, Nd And Sr Isotopic Geochemistry

According to the article ${ }^{17}$ this specimen [Bellsbank kimberlite, South Africa] was dated in 1991 by scientists from the University Of Rochester, New York, Guiyang University in China, and the United States Geological Survey, Colorado. According to the article ${ }^{18}$ the age of the samples is just 1 million years. If we run the various isotope ratios ${ }^{19}$ from two different tables in the article through Microsoft Excel we get the following values respectively:

| Age Dating Summary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Table | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 87Rb/86Sr |  |
| Summaries | Age | Age | Age | Age |  |
| Average | 5,057 | 5,092 | 10,182 | $\mathbf{- 1 , 5 0 2}$ |  |
| Maximum | 5,120 | 8,584 | 17,171 | 0 |  |
| Minimum | 5,002 | 0 | 0 | $-3,593$ |  |
| Difference | 118 | 8,584 | 17,171 | $\mathbf{3 , 5 9 3}$ |  |
| Table 5 |  |  |  |  |  |

In tables 37 to 40 we can see some of the astounding spread of dates [million of years]. The oldest date is over 17 billion years old. The youngest is less than negative 3.5 billion years. The difference between the two is over 20 billion years. According to the article the true age of the rock is just one million years old!

208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| 17,171 | 13,322 | 9,737 | $\mathbf{7 , 9 6 8}$ |
| 15,343 | 13,202 | 9,707 | 7,830 |
| 15,299 | 13,001 | 9,049 | 7,250 |
| 15,136 | 11,119 | 8,420 | 6,972 |
| 15,054 | 10,873 | 8,419 | $\mathbf{6 , 6 2 8}$ |
| 13,476 | 10,758 | 8,368 | $\mathbf{6 , 5 7 7}$ |

Table 6
206Pb/238U, Maximum Ages

| Age | Age | Age |
| :---: | :---: | :---: |
| $\mathbf{8 , 5 8 4}$ | $\mathbf{6 , 6 5 6}$ | $\mathbf{5 , 5 7 6}$ |
| $\mathbf{7 , 9 7 5}$ | $\mathbf{6 , 6 5 4}$ | $\mathbf{5 , 5 2 0}$ |
| $\mathbf{7 , 3 1 4}$ | $\mathbf{6 , 5 1 8}$ | $\mathbf{5 , 2 8 5}$ |
| $\mathbf{7 , 1 8 4}$ | $\mathbf{6 , 4 4 8}$ | $\mathbf{5 , 1 5 9}$ |
| $\mathbf{6 , 8 6 1}$ | $\mathbf{5 , 7 5 8}$ | $\mathbf{5 , 0 9 9}$ |

Table 7
Pb 207/206, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 , 1 2 0}$ | $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 0}$ | $\mathbf{5 , 0 4 9}$ |
| $\mathbf{5 , 1 0 9}$ | $\mathbf{5 , 0 6 6}$ | $\mathbf{5 , 0 5 9}$ | $\mathbf{5 , 0 4 5}$ |
| $\mathbf{5 , 0 9 7}$ | $\mathbf{5 , 0 6 6}$ | $\mathbf{5 , 0 5 1}$ | $\mathbf{5 , 0 4 4}$ |
| $\mathbf{5 , 0 7 7}$ | $\mathbf{5 , 0 6 5}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 4 4}$ |
| $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 2}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 3 3}$ |
| $\mathbf{5 , 0 6 7}$ | $\mathbf{5 , 0 6 0}$ | $\mathbf{5 , 0 5 0}$ | $\mathbf{5 , 0 2 2}$ |

Table 8

87Rb/86Sr, Minimum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $-3,593$ | $-2,981$ | $-1,917$ | $-1,323$ |
| $-3,231$ | $-2,725$ | $-1,611$ | $-1,245$ |
| $-3,089$ | $-2,050$ | $-1,499$ | $-1,229$ |
| $-3,067$ | $-1,926$ | $-1,370$ | $-1,194$ |

Table 9

## Sr, Nd, And Pb Isotopes

According to the article ${ }^{\mathbf{2 0}}$ this specimen [eastern China] was dated in 1992 by scientists from the University Of Rochester, New York, Guiyang University in China, and the United States Geological Survey, Colorado. According to the article: "Observed high $\mathrm{Th} / \mathrm{U}, \mathrm{Rb} / \mathrm{Sr}, 87 \mathrm{Sr} / 86 \mathrm{Sr}$ and Delta 208 , low $\mathrm{Sm} / \mathrm{Nd}$ ratios, and a large negative Nd in phlogopite pyroxenite with a depleted mantle model age of 2.9 Ga , support our contention that metasomatized continental lower mantle lithosphere is the source for the EMI component." ${ }^{20}$ If we run the various isotope ratios ${ }^{21}$ from two different tables in the article through Isoplot we get the following values respectively:

Age Dating Summary

| Dating | 232Th/208Pb | 206Pb/238U | 207Pb/206Pb |
| :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age |
| Average | 14,198 | $\mathbf{7 , 3 6 6}$ | 5,014 |
| Maximum | 94,396 | 22,201 | 5,077 |
| Minimum | 79 | 1,117 | 4,945 |
| Difference | 94,317 | 21,083 | $\mathbf{1 3 1}$ |

Table 10

If the true age is 2.9 billion years why so much discordance? In tables 41 to 43 we can see some of the astounding spread of dates [million of years]. The oldest date is over 94 billion years old. The youngest is 79 million years. The difference between the two is over 94 billion years. The oldest date is 1,194 times older than the youngest. According to the article the true age of the rock is 2.9 billion years old!
$\underline{\text { 208Pb/232Th, Maximum Ages }}$

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{9 4 , 3 9 6}$ | $\mathbf{3 9 , 2 6 7}$ | $\mathbf{1 0 , 5 9 5}$ | $\mathbf{8 , 1 7 1}$ |
| $\mathbf{9 0 , 6 8 3}$ | $\mathbf{2 6 , 2 6 6}$ | $\mathbf{1 0 , 2 8 4}$ | $\mathbf{7 , 7 8 9}$ |
| $\mathbf{7 4 , 6 3 9}$ | $\mathbf{1 8 , 3 3 4}$ | $\mathbf{9 , 3 2 8}$ | $\mathbf{7 , 6 3 8}$ |
| $\mathbf{5 8 , 1 5 3}$ | $\mathbf{1 6 , 3 5 7}$ | $\mathbf{8 , 8 2 1}$ | $\mathbf{7 , 3 7 5}$ |
| $\mathbf{5 5 , 3 2 4}$ | $\mathbf{1 4 , 2 5 0}$ | $\mathbf{8 , 7 7 1}$ | $\mathbf{7 , 3 1 7}$ |
| $\mathbf{4 5 , 2 4 2}$ | $\mathbf{1 1 , 2 1 5}$ | $\mathbf{8 , 4 0 3}$ | $\mathbf{5 , 7 5 9}$ |

Table 11

206Pb/238U, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 2 , 2 0 1}$ | $\mathbf{9 , 8 7 8}$ | $\mathbf{7 , 3 4 8}$ | $\mathbf{5 , 7 4 6}$ |
| 21,813 | $\mathbf{9 , 6 5 6}$ | $\mathbf{7 , 3 3 5}$ | $\mathbf{5 , 7 0 0}$ |
| $\mathbf{1 9 , 3 2 0}$ | $\mathbf{9 , 0 5 4}$ | $\mathbf{7 , 2 4 9}$ | $\mathbf{5 , 2 1 8}$ |
| $\mathbf{1 6 , 6 5 6}$ | $\mathbf{8 , 2 4 2}$ | $\mathbf{7 , 2 0 2}$ | $\mathbf{5 , 2 0 1}$ |
| $\mathbf{1 6 , 2 0 0}$ | $\mathbf{8 , 0 4 4}$ | $\mathbf{7 , 0 1 9}$ | $\mathbf{5 , 1 6 3}$ |
| $\mathbf{1 4 , 7 4 8}$ | $\mathbf{7 , 9 9 6}$ | $\mathbf{6 , 9 2 3}$ | $\mathbf{5 , 1 5 9}$ |
| $\mathbf{1 3 , 6 0 7}$ | $\mathbf{7 , 5 9 0}$ | $\mathbf{6 , 8 4 8}$ | $\mathbf{5 , 0 9 9}$ |
| $\mathbf{1 1 , 2 5 6}$ | $\mathbf{7 , 4 2 2}$ | $\mathbf{6 , 2 9 2}$ | $\mathbf{4 , 8 1 2}$ |

Table 12

## Evolution Of Reunion Hotspot Mantle

According to the article ${ }^{22}$ this specimen [Reunion and Mauritius Islands] was dated in 1995 by scientists from the University of Hawaii. According to the article: "Whole-rock powder obtained from P. Krishnamurthy. ( $87 \mathrm{Sr} / 86 \mathrm{Sr}$ ), and em(T) are age-corrected values; $T=66 \mathrm{Ma}$ for the drill hole lavas." ${ }^{23}$ If we run the various isotope ratios ${ }^{24}$ from two different tables in the article through Isoplot we get the following values respectively:

Age Dating Summary

| Age Dating Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Table | 232Th/208Pb | 206Pb/238U | 207Pb/206Pb |
| Summaries | Age | Age | Age |
| Average | $\mathbf{8 , 0 7 9}$ | $\mathbf{4 , 4 4 9}$ | $\mathbf{4 , 9 7 6}$ |
| Maximum | $\mathbf{1 3 , 2 8 7}$ | $\mathbf{6 , 2 8 5}$ | $\mathbf{5 , 0 1 6}$ |
| Minimum | $\mathbf{5 , 6 4 1}$ | $\mathbf{3 , 0 1 0}$ | $\mathbf{4 , 9 5 3}$ |
| Difference | $\mathbf{7 , 6 4 6}$ | $\mathbf{3 , 2 7 6}$ | $\mathbf{6 3}$ |

Table 13
208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| 13,287 | 8,725 | 7,363 | $\mathbf{6 , 5 4 0}$ |
| 11,832 | 8,609 | 7,362 | $\mathbf{6 , 4 7 9}$ |
| 11,017 | 7,541 | 7,080 | $\mathbf{6 , 3 2 3}$ |
| 10,357 | 7,517 | 7,017 | 5,660 |
| 9,101 | 7,446 | 6,679 | $\mathbf{5 , 6 4 1}$ |
| Table 14 |  |  |  |

206Pb/238U, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{6 , 2 8 5}$ | $\mathbf{4 , 9 0 3}$ | $\mathbf{4 , 1 4 1}$ | $\mathbf{3 , 8 7 5}$ |
| $\mathbf{6 , 1 6 5}$ | $\mathbf{4 , 6 3 3}$ | $\mathbf{4 , 1 3 3}$ | $\mathbf{3 , 6 4 7}$ |
| $\mathbf{5 , 7 6 7}$ | $\mathbf{4 , 3 4 2}$ | $\mathbf{4 , 0 1 1}$ | $\mathbf{3 , 5 4 8}$ |
| $\mathbf{5 , 5 5 3}$ | $\mathbf{4 , 2 5 8}$ | $\mathbf{4 , 0 0 1}$ | $\mathbf{3 , 3 6 9}$ |
| $\mathbf{5 , 1 5 2}$ | $\mathbf{4 , 2 2 0}$ | $\mathbf{3 , 9 7 3}$ | $\mathbf{3 , 0 1 0}$ |

Table 15

According to dating charts in the article, the true age is just 66 million years old! ${ }^{25}$

## An Extremely Low U/Pb Source

According to the article ${ }^{26}$ this specimen [lunar meteorite] was dated in 1993 by scientists from the United States Geological Survey, Colorado, the United States Geological Survey, California and The National Institute of Polar Research, Tokyo. According to the article: "The $\mathrm{Pb}-\mathrm{Pb}$ internal isochron obtained for acid leached residues of separated mineral fractions yields an age of $3940 \pm 28 \mathrm{Ma}$, which is similar to the $\mathrm{U}-\mathrm{Pb}$ ( $3850 \pm 150$ $\mathrm{Ma})$ and $\mathrm{Th}-\mathrm{Pb}(3820 \pm 290 \mathrm{Ma})$ internal isochron ages. The $\mathrm{Sm}-\mathrm{Nd}$ data for the mineral separates yield an internal isochron age of $3871 \pm 57 \mathrm{Ma}$ and an initial $143 \mathrm{Nd} / \mathrm{I} 44 \mathrm{Nd}$ value of $0.50797 \pm 10$. The $\mathrm{Rb}-\mathrm{Sr}$ data yield an internal isochron age of $3840 \pm 32 \mathrm{Ma} .{ }^{26}$

Rb/Sr Age Dating Summary

| Average | $\mathbf{3 , 6 1 9}$ |
| :---: | :---: |
| Maximum | $\mathbf{5 , 3 8 5}$ |
| Minimum | $\mathbf{7 2 1}$ |
| Difference | $\mathbf{4 , 6 6 4}$ |

Table 16
Uranium Age Dating Summary

| Table | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 207Pb/235U |
| :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age |
| Average | $\mathbf{4 , 6 7 3}$ | $\mathbf{8 , 0 3 5}$ | $\mathbf{1 0 , 1 4 8}$ | $\mathbf{4 , 5 4 6}$ |
| Maximum | $\mathbf{5 , 0 1 8}$ | $\mathbf{5 6 , 9 2 3}$ | $\mathbf{6 5 , 2 8 6}$ | $\mathbf{8 , 1 2 8}$ |
| Minimum | $\mathbf{3 , 9 6 1}$ | $\mathbf{1 , 4 7 7}$ | $\mathbf{2 , 5 4 2}$ | $\mathbf{2 , 7 8 4}$ |
| Difference | $\mathbf{1 , 0 5 7}$ | $\mathbf{5 5 , 4 4 5}$ | $\mathbf{6 2 , 7 4 4}$ | $\mathbf{5 , 3 4 4}$ |

Table 17
The article claims that the $\mathrm{Rb} / \mathrm{Sr}$ age is 3.8 billion years for this meteorite. If that is the true age why are all the Uranium/Thorium/Lead dates ${ }^{27}$ so stupid? Or are they right and the $\mathrm{Rb} / \mathrm{Sr}$ is wrong?

208Pb/232Th, Maximum Ages

| Age | Age | Age | Age |
| :---: | :---: | :---: | :---: |
| $\mathbf{6 5 , 2 8 6}$ | $\mathbf{1 4 , 4 3 0}$ | $\mathbf{9 , 0 9 4}$ | $\mathbf{5 , 4 0 1}$ |
| $\mathbf{3 3 , 8 9 8}$ | $\mathbf{1 4 , 4 1 0}$ | $\mathbf{6 , 5 2 0}$ | $\mathbf{5 , 3 9 6}$ |
| 25,013 | $\mathbf{1 3 , 1 0 7}$ | $\mathbf{6 , 1 6 6}$ | $\mathbf{5 , 3 6 5}$ |
| 22,178 | $\mathbf{1 2 , 7 3 8}$ | $\mathbf{6 , 1 2 1}$ | $\mathbf{5 , 0 9 8}$ |
| 21,204 | $\mathbf{1 1 , 6 4 1}$ | $\mathbf{5 , 6 7 1}$ | $\mathbf{5 , 0 3 5}$ |
| $\mathbf{1 7 , 6 1 1}$ | $\mathbf{1 1 , 1 7 4}$ | $\mathbf{5 , 4 0 8}$ | $\mathbf{4 , 6 7 8}$ |
| Table 18 |  |  |  |

Table 18

| $\mathbf{2 0 6 P b} / \mathbf{2 3 8 U}$, Maximum Ages |  |  |  |
| :---: | :---: | :---: | :---: |
| Age | Age | Age | Age |
| $\mathbf{5 6 , 9 2 3}$ | $\mathbf{1 0 , 8 9 5}$ | $\mathbf{6 , 7 6 4}$ | $\mathbf{5 , 7 7 7}$ |
| $\mathbf{2 7 , 3 1 3}$ | $\mathbf{1 0 , 2 7 8}$ | $\mathbf{6 , 6 7 0}$ | $\mathbf{5 , 6 2 5}$ |
| 17,873 | $\mathbf{9 , 6 5 3}$ | $\mathbf{6 , 4 4 9}$ | $\mathbf{5 , 6 0 2}$ |
| $\mathbf{1 3 , 6 8 0}$ | $\mathbf{8 , 0 0 9}$ | $\mathbf{6 , 4 3 6}$ | $\mathbf{5 , 2 7 8}$ |
| $\mathbf{1 3 , 6 2 3}$ | $\mathbf{7 , 3 9 5}$ | $\mathbf{6 , 0 7 0}$ | $\mathbf{5 , 1 4 7}$ |

Table 19

## The Origin Of Geochemical Diversity

According to the article ${ }^{28}$ this specimen [lunar basalt] was dated in 2007 by scientists from New Mexico University. According to $\mathrm{Rb} / \mathrm{Sr}$ isochron diagram the age of the material is 3.678 billion years. ${ }^{29}$ If we run the
various isotope ratios ${ }^{30}$ from two different tables in the article through Isoplot we get the following values respectively:

Age Dating Summary

| Table | 207Pb/206Pb | 206Pb/238U | 87Rb/86Sr |
| :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age |
| Average | 4,635 | 6,565 | 4,672 |
| Maximum | 5,111 | $\mathbf{1 8 , 2 1 3}$ | $\mathbf{7 , 0 9 4}$ |
| Minimum | 4,028 | 3,706 | 3,476 |
| Difference | $\mathbf{1 , 0 8 2}$ | 14,506 | $\mathbf{3 , 6 1 8}$ |
| Table 20 |  |  |  |

The dating methods all disagree with each other. There is a wide spread of dates which are just random.

## Continental Lithospheric Contribution

According to the article ${ }^{31}$ this specimen from southern Portugal was dated in 1997 by scientists from France. According to the article Argon and Rubidium dating defined the so called true ages as: "The age of the intrusion and crystallization of the alkaline rocks of the Serra de Monchique is 72 Ma , based on $\mathrm{Rb} / \mathrm{Sr}$ and $\mathrm{K} / \mathrm{Ar}$ dating." ${ }^{32}$ If we run the various isotope ratios ${ }^{33}$ from a table in the article through Isoplot we get the following values respectively:

| Age Dating Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Table | 207Pb/206Pb | 208Pb/232Th | 206Pb/238U | 87Rb/86Sr |
| Summaries | Age | Age | Age | Age |
| Average | $4,920$ | $6,126$ | $\mathbf{4 , 5 3 9}$ | -62 |
| Maximum | 4,949 | 10,084 | 7,723 | -50 |
| Minimum | $4,894$ | $2,616$ | 2,306 | -75 |
| Difference | $55$ | 7,467 | 5,417 | 25 |
| Table 21 |  |  |  |  |

The date of 72 million years is just a guess. The Thorium/Lead method gives dates 140 times older. The Uranium/Lead methods give dates 107 times older. Below we can see the maximum ages [million years] calculated form isotope ratios. Compare these with the so called true age!

| Maximum Ages |  |
| :---: | :---: |
| $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ | 206Pb/238U |
| $\mathbf{1 0 , 0 8 4}$ | $\mathbf{7 , 7 2 3}$ |
| $\mathbf{9 , 3 2 0}$ | $\mathbf{7 , 0 6 0}$ |
| $\mathbf{8 , 1 0 1}$ | $\mathbf{6 , 5 0 7}$ |
| $\mathbf{7 , 5 0 2}$ | $\mathbf{6 , 3 8 7}$ |
| $\mathbf{7 , 0 8 0}$ | $\mathbf{6 , 2 0 6}$ |
| $\mathbf{6 , 8 9 1}$ | $\mathbf{5 , 1 4 3}$ |
| $\mathbf{6 , 6 5 5}$ | $\mathbf{4 , 7 3 4}$ |
| $\mathbf{6 , 3 1 3}$ | $\mathbf{4 , 1 8 6}$ |
| 5,830 | $\mathbf{3 , 7 6 8}$ |
| 5,755 | $\mathbf{3 , 7 6 1}$ |
| 5,029 | $\mathbf{3 , 4 8 7}$ |

Table 22

## Garnet Granulite Xenoliths

According to the article ${ }^{34}$ this specimen from the northern Baltic shield was dated in 2001 by scientists from England, USA and Russia. According to the article Argon dating defined the so called true ages as 400 to 2200 million years. ${ }^{35}$ If we run the various isotope ratios ${ }^{36}$ from table 4 in the article through Isoplot we get the following values respectively:

| Age Dating Summary |  |  |
| :---: | :---: | :---: |
| Table | 206Pb/238U | 207Pb/206Pb |
| Summaries | Age | Age |
| Average | $\mathbf{1 7 , 0 0 2}$ | $\mathbf{5 , 0 4 6}$ |
| Maximum | $\mathbf{4 0 , 0 5 9}$ | $\mathbf{5 , 2 9 5}$ |
| Minimum | $\mathbf{1 , 6 0 8}$ | $\mathbf{3 , 9 0 8}$ |
| Difference | $\mathbf{3 8 , 4 5 2}$ | $\mathbf{1 , 3 8 7}$ |
| Table 23 |  |  |

Below are the maximum ages calculated from isotope ratios in tables 4 and 5 in the article:

| 206Pb/238U, Maximum Ages |  |  |  |
| :---: | :---: | :---: | :---: |
| $206 P b / 238 \mathrm{U}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ | $206 \mathrm{~Pb} / 238 \mathrm{U}$ |
| Age | Age | Age | Age |
| 40,059 | 28,118 | 21,092 | 13,724 |
| 35,742 | 27,127 | 16,026 | 13,404 |
| 34,459 | 25,884 | 14,371 | 12,747 |
| 33,978 | 21,209 | 14,272 | 10,956 |
| Table 24 |  |  |  |

206Pb/238U, Maximum Ages

| $206 \mathrm{~Pb} / 238 \mathrm{U}$ | 206Pb/238U | 206Pb/238U |
| :---: | :---: | :---: |
| Age | Age | Age |
| 20,648 | 13,724 | 10,956 |
| 17,527 | 13,404 | 10,049 |
| 16,336 | 12,622 | 6,792 |
| 15,626 | 12,165 | $\mathbf{6 , 2 6 5}$ |
| 15,018 | 11,432 | 5,865 |

Table 25
If we run more ratios form and online supplement ${ }^{37}$ we get ages uniformly 5 billion years old. Compare these with the so called true age!

## The Isotope And Trace Element Budget

According to the article ${ }^{38}$ this specimen from the Devil River Arc System, New Zealand was dated in 2000 by scientists from Germany. According to the article, the so called true ages is Cambrian. ${ }^{102}$ If we run the various isotope ratios ${ }^{39}$ from table 4 in the article through Isoplot we get the following values respectively:

Age Dating Summary

| Table | 207Pb/206Pb | 206Pb/238U | 87Rb/86Sr |
| :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age |
| Average | 4,970 | 19,143 | 500 |
| Maximum | 4,986 | 21,761 | 501 |
| Minimum | 4,932 | $\mathbf{1 5 , 1 5 0}$ | 495 |
| Difference | 54 | $\mathbf{6 , 6 1 1}$ | $\mathbf{6}$ |

Table 26
The Lead/Lead dates are ten times too old and the Uranium/Lead dates are 40 times too old!

## Petrogenesis And Origins Of Mid-Cretaceous

According to the article ${ }^{40}$ this specimen from the Intraplate Volcanism in Marlborough, New Zealand was dated in 2010 by scientists from New Zealand. According to the essay "the intraplate basalts in New Zealand that have been erupted intermittently over the last c. 100 Myr." ${ }^{41}$ Various tables ${ }^{42}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates over a 10 billion year range. None of the Lead based dating methods even come vaguely close to a Cretaceous age.

Age Dating Summary

| Table | 207Pb/206Pb | 207Pb/235U | 87Rb/86Sr | 208Pb/232Th | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summaries | Age | Age | Age | Age | Age |
| Average | $\mathbf{4 , 8 7 6}$ | $\mathbf{4 , 4 1 6}$ | 59 | $\mathbf{6 , 3 3 3}$ | $\mathbf{3 , 5 1 5}$ |
| Maximum | $\mathbf{4 , 9 4 5}$ | $\mathbf{5 , 1 5 9}$ | $\mathbf{8 5}$ | $\mathbf{1 0 , 7 1 6}$ | $\mathbf{5 , 7 1 7}$ |
| Minimum | $\mathbf{4 , 8 3 6}$ | $\mathbf{4 , 0 8 8}$ | $\mathbf{1 5}$ | $\mathbf{4 , 7 8 5}$ | $\mathbf{2 , 7 1 2}$ |
| Difference | $\mathbf{1 0 9}$ | $\mathbf{1 , 0 7 1}$ | $\mathbf{7 0}$ | $\mathbf{5 , 9 3 1}$ | $\mathbf{3 , 0 0 5}$ |

Table 27

Petrogenesis Of The Flood Basalts
According to the article ${ }^{43}$ this basalt form the Northern Kerguelen Archipelago was dated in 1998 by scientists from the Massachusetts Institute Of Technology, University of Brussels, Belgium and the San Diego State University. According to the essay: "The dominance of this isotopic signature in archipelago lavas for 30 my and its presence in $\sim 40 \mathrm{Ma}$ gabbros is consistent with the previous interpretation that these are isotopic characteristics of the Kerguelen Plume." ${ }^{43}$ Various tables ${ }^{44}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates of over a 44 billion year range! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

Age Dating Summary

| Mt Rabouillere <br> Summary | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 7 P b} / \mathbf{2 0 6 P b}$ | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / \mathbf{2 3 5 U}$ | $\mathbf{2 0 8 P b} / 232 \mathbf{T h}$ |  |
| Average | $\mathbf{2 1}$ | $\mathbf{5 , 0 0 8}$ | $\mathbf{4 , 9 0 3}$ | $\mathbf{4 , 9 7 5}$ | $\mathbf{6 , 1 4 2}$ |
| Maximum | $\mathbf{3 0}$ | $\mathbf{5 , 0 1 9}$ | $\mathbf{5 , 3 5 5}$ | $\mathbf{5 , 1 0 0}$ | $\mathbf{7 , 7 8 8}$ |
| Minimum | -7 | $\mathbf{5 , 0 0 0}$ | $\mathbf{4 , 3 0 5}$ | $\mathbf{4 , 7 9 3}$ | $\mathbf{2 , 7 9 9}$ |
| Difference | $\mathbf{3 8}$ | $\mathbf{2 0}$ | $\mathbf{1 , 0 5 0}$ | $\mathbf{3 0 7}$ | $\mathbf{4 , 9 8 9}$ |

Table 28

Age Dating Summary

| Mount Bureau <br> Summary | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 87Rb/86Sr | 207Pb/206Pb | $\mathbf{2 0 6 P b} / 238 \mathrm{U}$ | $\mathbf{2 0 7 P b} / 235 \mathrm{U}$ | $\mathbf{2 0 8 P b} / 232 \mathrm{Th}$ |
| Average | 27 | 5,006 | $\mathbf{5 , 9 2 4}$ | $\mathbf{5 , 1 6 1}$ | $\mathbf{8 , 4 1 0}$ |
| Maximum | 30 | 5,020 | $\mathbf{2 3 , 3 6 6}$ | $\mathbf{8 , 4 9 6}$ | $\mathbf{4 4 , 3 7 8}$ |
| Minimum | 24 | $\mathbf{4 , 9 9 4}$ | $\mathbf{3 , 3 3 5}$ | $\mathbf{4 , 4 5 4}$ | $\mathbf{2 , 6 5 0}$ |
| Difference | $\mathbf{6}$ | $\mathbf{2 6}$ | $\mathbf{2 0 , 0 3 1}$ | $\mathbf{4 , 0 4 2}$ | $\mathbf{4 1 , 7 2 8}$ |

Table 29

## Nature Of The Source Regions

According to the article ${ }^{45}$ this lava from southern Tibet was dated in 2004 by scientists from the Open University in Milton Keynes, the University of Bristol and Cardiff University. According to the essay: "Most samples are Miocene in age, ranging from 10 to 25 Ma in the south and 19 Ma to the present day in northern Tibet." ${ }^{46}$ Various tables ${ }^{47}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at strong disagreement with each other. There is a spread of dates of over an 88 billion year range! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.
Age Dating Summary

| North Tibet | 208Pb/232Th | 207Pb/235U | 207Pb/206Pb | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: |
| Summary | Million Years | Million Years | Million Years | Million Years |
|  | $\mathbf{1 1 , 4 2 0}$ | $\mathbf{5 , 1 3 6}$ | $\mathbf{4 , 9 8 0}$ | $\mathbf{7 , 7 8 3}$ |
| 87Rb/86Sr | $\mathbf{1 1 , 3 5 0}$ | $\mathbf{5 , 1 3 8}$ | $\mathbf{4 , 9 8 0}$ | $\mathbf{8 , 0 2 3}$ |
| Model Age | $\mathbf{1 3 , 4 7 5}$ | $\mathbf{5 , 1 3 5}$ | $\mathbf{4 , 9 8 7}$ | $\mathbf{8 , 3 0 5}$ |
| 13 Million Years | $\mathbf{1 1 , 5 0 4}$ | $\mathbf{5 , 1 4 0}$ | $\mathbf{4 , 9 8 9}$ | $\mathbf{7 , 3 4 9}$ |
|  | $\mathbf{8 1 , 6 1 4}$ | $\mathbf{7 , 4 7 0}$ | $\mathbf{4 , 9 8 7}$ | $\mathbf{3 3 , 7 5 1}$ |
|  | $\mathbf{8 8 , 2 9 4}$ | $\mathbf{7 , 4 7 1}$ | $\mathbf{4 , 9 9 1}$ | $\mathbf{3 3 , 7 4 2}$ |

Table 30
Age Dating Summary

| South Tibet | 208Pb/232Th | 207Pb/235U | 207Pb/206Pb | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: |
| Summary | Million Years | Million Years | Million Years | Million Years |
|  | $\mathbf{1 1 , 1 0 2}$ | $\mathbf{3 1 3}$ | $\mathbf{4 , 9 8 2}$ | $\mathbf{6 , 3 3 1}$ |
|  | $\mathbf{6 , 0 9 2}$ | $\mathbf{9 4 6}$ | $\mathbf{4 , 9 1 9}$ | $\mathbf{5 , 7 9 9}$ |
| $\mathbf{8 7 R b} / 86 S r$ | $\mathbf{9 , 2 6 5}$ | 266 | $\mathbf{4 , 9 8 0}$ | $\mathbf{6 , 6 8 2}$ |
| Model Age | $\mathbf{4 , 8 2 6}$ | 238 | $\mathbf{4 , 9 9 2}$ | $\mathbf{4 , 0 8 6}$ |
| 13 Million Years | $\mathbf{8 , 2 0 5}$ | 294 | $\mathbf{4 , 9 8 0}$ | $\mathbf{5 , 5 6 7}$ |
|  | $\mathbf{2 5 , 0 1 5}$ | 447 | $\mathbf{4 , 9 9 4}$ | $\mathbf{1 3 , 3 2 8}$ |
|  | $\mathbf{3 3 , 1 9 1}$ | $\mathbf{4 8 2}$ | $\mathbf{4 , 9 9 2}$ | $\mathbf{1 5 , 0 5 3}$ |

Table 31

## Generation Of Palaeocene Adakitic Andesites

According to the article ${ }^{48}$ this rock formation from North Eastern China was dated in 2007 by scientists from China and Japan. According to the essay the true age is: "Palaeocene (c. $55-58 \mathrm{Ma}$ ) adakitic andesites from the Yanji area." ${ }^{48}$ Numerous table and charts affirm this as the true age. ${ }^{49} \mathrm{~A}$ table ${ }^{50}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of over 10 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

Age Dating Summary

| Dating | 87Rb/86Sr | 207Pb/206Pb | 208Pb/232Th | 206Pb/238U | 207Pb/235U |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age | Age | Age |
| Average | 51 | 5,022 | $\mathbf{8 , 9 4 1}$ | 8,754 | $\mathbf{5 , 9 0 8}$ |
| Maximum | 66 | 5,024 | 10,518 | $\mathbf{9 , 6 6 9}$ | $\mathbf{6 , 0 5 2}$ |
| Minimum | 40 | 5,020 | $\mathbf{7 , 8 0 0}$ | $\mathbf{7 , 4 0 3}$ | $\mathbf{5 , 6 4 1}$ |
| Difference | 26 | $\mathbf{3}$ | $\mathbf{2 , 7 1 8}$ | $\mathbf{2 , 2 6 6}$ | $\mathbf{4 1 1}$ |

Table 32

## Evidence For A Widespread Tethyan

According to the article ${ }^{51}$ this rock formation from North Eastern China was dated in 2007 by scientists from China and Japan. According to the essay the true age is: "Here, we report age-corrected $\mathrm{Nd}-\mathrm{Pb}-\mathrm{Sr}$ isotope data for 100-350 Ma basalt, diabase, and gabbro from widely separated Tethyan locations in Tibet, Iran, Albania, the eastern Himalayan syntaxis, and the seafloor off NW Australia (Fig. 1)." ${ }^{52}$ The author concludes that the rocks are from the Cretaceous and Jurassic time periods: "We collected Early Jurassic to Early Cretaceous Neotethyan magmatic rocks in 1998 from outcrops along 1300 km of the Indus-Yarlung suture zone." ${ }^{53}$ Several tables ${ }^{54}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 60 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age.

Age Dating Summary

| Dating | 87Rb/86Sr | 207Pb/206Pb | 208Pb/232Th | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: |
| Summary | Age | Age | Age | Age |
| Average | 168 | 4,999 | 22,356 | 7,014 |
| Maximum | 1,739 | 5,236 | 58,796 | 15,747 |
| Minimum | 0 | 4,982 | 10,699 | 5,042 |
| Difference | 1,739 | 254 | 48,096 | 10,705 |

Table 33

| 208Pb/232Th, Maximum Ages |  |  |  |
| :---: | :---: | :---: | :---: |
| 208Pb/232Th | 208Pb/232Th | 208Pb/232Th | 208Pb/232Th |
| Age | Age | Age | Age |
| $\mathbf{5 8 , 7 9 6}$ | 29,705 | 18,607 | 11,427 |
| 54,206 | 27,710 | 18,121 | 11,377 |
| 48,252 | 27,422 | 17,797 | 11,366 |
| 47,976 | 26,674 | 17,787 | 11,241 |
| 46,117 | 26,369 | 17,591 | 10,718 |
| 42,203 | 25,972 | 17,536 | 10,699 |
| 42,192 | 25,590 | 17,054 | 10,699 |
| 41,604 | 25,096 | 16,053 | 10,300 |
| 41,343 | 24,010 | 15,299 | 9,357 |
| 41,231 | 22,718 | 14,340 | $\mathbf{8 , 6 3 2}$ |
| 39,637 | 22,307 | 13,845 | $\mathbf{8 , 4 8 6}$ |
| 38,125 | 22,228 | 13,772 | $\mathbf{8 , 0 5 7}$ |
| 37,115 | 21,827 | 13,652 | $\mathbf{6 , 4 9 7}$ |
| 35,012 | 21,560 | 13,404 | 5,573 |
| 33,584 | 19,910 | 13,403 | 5,425 |


| 31,556 | 19,594 | 13,006 | 4,869 |
| :--- | :--- | :--- | :--- |
| 31,286 | 19,148 | 12,171 |  |
| 30,740 | 18,765 | 11,540 |  |

Table 34

206Pb/238U, Maximum Ages

| 206Pb/238U | 206Pb/238U | 206Pb/238U | 206Pb/238U | 206Pb/238U |
| :---: | :---: | :---: | :---: | :---: |
| Age | Age | Age | Age | Age |
| 15,747 | 11,309 | 8,770 | 6,602 | 5,724 |
| 15,067 | 11,248 | 8,508 | 6,589 | 5,720 |
| 14,363 | 10,360 | 8,315 | 6,421 | 5,601 |
| 13,580 | 9,643 | 8,314 | 6,398 | 5,599 |
| 13,204 | 9,427 | 8,072 | 6,369 | 5,573 |
| 12,780 | 9,300 | 8,024 | 6,357 | 5,515 |
| 11,757 | 9,123 | 7,604 | 6,219 | 5,462 |
| 11,659 | 9,014 | 7,504 | 5,863 | 5,311 |
| 11,537 | 8,996 | 7,056 | 5,861 | 5,286 |
| 11,313 | 8,954 | 7,002 | 5,807 | 5,120 |

Table 35

## Origin Of The Indian Ocean-Type Isotopic Signature

According to the article ${ }^{55}$ this rock formation the Philippine Sea plate was dated in 1998 by scientists from Department of Geology, Florida International University, Miami. According to the essay the true age is: "Spreading centers in three basins, the West Philippine Basin (37-60 Ma), the Parece Vela Basin (18-31 Ma), and the Shikoku Basin (17-25 Ma) are extinct, and one, the Mariana Trough ( $0-6 \mathrm{Ma}$ ), is active (Figure 1)." ${ }^{55}$ Numerous table and charts affirm this as the true age. ${ }^{56}$ Two tables ${ }^{57}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 100 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 3,971 times older than the youngest date.

Age Dating Summary

| Dating | Age | Age | Age | Age | Age |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary | 87Rb/86Sr | 147Sm/144Nd | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th |
| Average | 42 | 41 | 4,960 | 4,260 | 8,373 |
| Maximum | 55 | 54 | 4,989 | $\mathbf{7 , 0 9 3}$ | $\mathbf{1 3 , 4 3 0}$ |
| Minimum | 19 | 20 | 4,921 | 1,904 | $\mathbf{3 , 0 6 5}$ |
| Difference | 37 | 33 | 68 | $\mathbf{5 , 1 8 8}$ | 10,365 |

## U-Th-Pb Dating Of Secondary Minerals

According to the article ${ }^{58}$ this rock formation Yucca Mountain, Nevada was dated in 2008 by scientists from United States Geological Survey, Geological Survey of Canada, and the Australian National University. According to the essay the true age is unknown. ${ }^{59}$ Other authors have affirmed the same problem. ${ }^{60}$ Two tables ${ }^{61}$ in the essay have isotopic ratios which can be calculated. As we can see below they are all at radical disagreement with each other. There is a spread of dates of almost 353 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 350,000 times older than the youngest date.

| Age Dating Summary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dating | 207Pb/206Pb | 206Pb/238U | 208Pb/232Th | 87Rb/86Sr |  |
| Summary | Age | Age | Age | Age |  |
| Average | $\mathbf{3 , 4 5 9}$ | $\mathbf{4 , 8 9 1}$ | $\mathbf{9 , 9 8 4}$ | $\mathbf{1 2}$ |  |
| Maximum | $\mathbf{8 , 1 2 6}$ | 31,193 | $\mathbf{3 5 2 , 9 6 2}$ | $\mathbf{1 3}$ |  |
| Minimum | -445 | 1 | 2 | $\mathbf{1 1}$ |  |
| Difference | $\mathbf{8 , 5 7 1}$ | $\mathbf{3 1 , 1 9 2}$ | $\mathbf{3 5 2 , 9 6 0}$ | 2 |  |

Another table ${ }^{61}$ in the essay has a list of calculated dates. As we can see below they are all at radical disagreement with each other. There is a spread of dates of 82 billion years! None of the Uranium/Lead based dating methods even come vaguely close to the so called true age. The oldest date is 82,000 times older than the youngest date.

| Age Dating Summary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dating | 206Pb/238U | 207Pb/235U | 208Pb/232Th | 87Rb/86Sr |  |
| Summary | Age | Age | Age | Age |  |
| Average | $\mathbf{1 , 5 4 0}$ | 46 | 7,687 | 12 |  |
| Maximum | 20,209 | 486 | 82,030 | 13 |  |
| Minimum | 1 | 0 | 3 | 11 |  |
| Difference | $\mathbf{2 0 , 2 0 8}$ | 486 | 82,027 | 2 |  |
| Table 38 |  |  |  |  |  |

## Conclusion

Evolutionists Schmitz and Bowring claim that Uranium/Lead dating is $99 \%$ accurate. ${ }^{62}$ Looking at some of the dating it is obvious that precision is much lacking. The Bible believer who accepts the creation account literally has no problem with such unreliable dating methods. Much of the data used in this dating method is selectively taken to suit and ignores data to the contrary.

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## Very Old Rocks

## By Paul Nethercott <br> August 2012

## Comparison of African and Canadian Diamonds

Table 1

| Congo | Leslie | Grizzly | Fox | Koala | Jwaneng |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{6 , 5 0 0}$ | $\mathbf{6 , 5 0 0}$ | $\mathbf{5 , 0 0 0}$ |
| $\mathbf{5 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 0 0 0}$ | $\mathbf{5 , 0 0 0}$ |
| $\mathbf{5 , 5 0 0}$ | $\mathbf{8 , 0 0 0}$ |  | $\mathbf{8 , 3 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{5 , 0 0 0}$ |
| $\mathbf{6 , 5 0 0}$ |  |  |  |  | $\mathbf{5 , 0 0 0}$ |
| $\mathbf{6 , 5 0 0}$ |  |  |  |  |  |
| $\mathbf{6 , 5 0 0}$ |  |  |  |  |  |

(Ages in millions of years)
These samples were dated in the year $2000{ }^{1}$ by scientists from the University of Manchester, University College London and the University of Glasgow in Scotland. Samples were taken from Canada (Fox, Grizzly, Leslie and Koala), the Democratic Republic of Congo and from Botswana (Jwaneng). The article states that "apparent ages for most diamonds are greater than the age of the Earth." ${ }^{2}$ Twenty one dates in this table ${ }^{2}$ are indeed older than the theory of evolution would allow. Fourteen are over six billion years old. The article admits that many dates are meaningless: "all apparent ages are higher than the host kimberlite eruption ages and most are higher than the 4.5 Ga geochron." ${ }^{3}$

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." " "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{6,7}$

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## Laser argon-40-argon-39 age determinations

This dating on Moon rocks was done in 1998 by scientists from the University of Manchester in England. "The Luna 24 mission returned 160 cm of core $(0.17 \mathrm{~kg})$ from the south eastern rim of Mare Crisium in August 1976." ${ }^{8}$ Nineteen samples from this Russian space probe were dates by Argon dating as being older than the evolutionist age of the Moon. " "The presence of trapped Ar components is evident from the anomalously high apparent ages determined from the measured $40 \mathrm{Ar} / 39 \mathrm{Ar}$ values for the initial $30-40 \%$ of K release." $\mathbf{1 0}$ "Interpretation of the apparent ages is problematic because neither the clast composition nor the proportions of clast and matrix in the analysed splits could be determined." ${ }^{11}$ The current consensus among evolutionists is that the true age of the Moon is 4.5 billion years old. ${ }^{12}$

Table 2

| Sample Number | Age, Million Years |
| :---: | :---: |
| lc_1 | 5,700 |
| 3_1 | 4,810 |
| 5_1 | 5,760 |
| 5_2 | 5,320 |
| 5_3 | 5,060 |
| 7a_1 | 6,930 |
| 7a_2 | 6,240 |
| 7a_3 | 5,760 |
| 7a_4 | 5,180 |
| 7a_7 | 4,810 |
| 7a_8 | 5,250 |
| 7a_9 | 4,880 |
| 7a_14 | 5,180 |
| 7b_1 | 5,400 |
| 7b_2 | 5,110 |
| 7c_1 | 6,080 |
| 7c_2 | 5,330 |
| 7c_4 | 4,990 |
| 7c_5 | 4,770 |

## Meteorite: Northwest Africa 482

"Northwest Africa 482 (NWA 482) is the second largest lunar meteorite and the fifth found in the Sahara. The complete stone had a mass of 1.015 kg before cutting" ${ }^{13}$ In 2002 it was dated by scientists from the Lunar and Planetary Laboratory, University of Arizona. The results of the dating ${ }^{14}$ are summarised below in table 3 .

Table 3

| Bulk Sample | Age, Million Years |
| :---: | :---: |
|  | $\mathbf{9 , 6 7 0}$ |
|  | $\mathbf{8 , 5 6 0}$ |
|  | $\mathbf{8 , 1 2 7}$ |
|  | $\mathbf{6 , 2 5 6}$ |
| Glass Sample | Age, Million Years |
|  | $\mathbf{9 , 9 0 5}$ |
|  | $\mathbf{7 , 3 8 8}$ |
|  | $\mathbf{5 , 7 0 8}$ |

The author of the article explains why he thinks that the ages are so absurd: "We believe that this ${ }^{40} \mathrm{Ar}$ is probably dominated by terrestrial contamination." ${ }^{15}$

## Rhenium-Osmium Isotopic Composition in Diamonds

These rock samples from the King Leopold ranges in Western Australia were dated in 2010 by scientists from the Department of Geological Sciences, University of Cape Town, South Africa and the Department of Terrestrial Magnetism, Carnegie Institution of Washington. ${ }^{16}$ The difference between the oldest and youngest dates ${ }^{17}$ as shown in table 4 is 16,254 million years. The author of the article explains why he thinks that the ages are so absurd: "The chalcopyrite inclusion from EL57 gives a model age older than the age of the Earth, evidence, perhaps, that this sulphide has suffered Re loss." ${ }^{18}$

Table 4

| Sample Name | Age, Million Years |
| :---: | :---: |
| EL10 | 1,658 |
| EL26 | 430 |
| EL57 | 7,457 |
| EL61 | 847 |
| EL23 | 1,264 |
| EL50 | 1,171 |
| EL54_1 | $-8,281$ |
| EL54_3 | -362 |
| EL55_1 | 7,973 |
| EL55_2 | -104 |
| EL65 | $-5,773$ |

## K-Ar Dating of Diamonds

This dating was done in 1983 by scientists from the Geophysical Institute, University of Tokyo, Tokyo. ${ }^{19}$ Eight dates are older than the evolutionist age of the Earth. ${ }^{20}$ The author blames Argon contamination for the bizarre dates that were obtained: "Because of the extremely small amount of argon, the hot blank corrections were similar to or even larger than the argon in the diamonds, resulting in a large uncertainty in the experimental results." ${ }^{20}$ The author admits that the dates are absolutely meaningless: "The apparent $\mathrm{K}-\mathrm{Ar}$ ages range from 150 million to nine billion years, indicating that the non radiogenic ${ }^{40} \mathrm{Ar}$ is significant. Since we have no way to make a correction for the non-radiogenic 40 Ar , the apparent $\mathrm{K}-\mathrm{Ar}$ age does not offer useful information on the age of the diamonds." ${ }^{21}$ Whichever date the author accepts is simply an arbitrary choice. Any date is just as good as any other date.

Table 5

| Sample Number | Age |
| :---: | :---: |
| Premier Mine | Million Years |
| 82701N | 5,800 |
| 827021 | 5,200 |
| 82703A | 8,200 |
| 8270413 | 3,300 |
| Unidentified Origin |  |
| 821104N | 4,800 |
| 821105H | 5,700 |
| 821106N | 4,400 |
| 821107N | 5,000 |
| 8211083 | 4,500 |
| 8211091 | 9,100 |


| 821110 N | 6,600 |
| :---: | :---: |
| 821111 N | $\mathbf{1 5 0}$ |

## Isotopic And Petrographic Evidence

This dating was done in 2008 by scientists from the Department of Earth \& Atmospheric Sciences, University of Alberta, Canada and from the Department of Earth Sciences, The Open University, England. ${ }^{22}$ Two meteorites (Allan Hills and Northwest Africa) were dated and fourteen dates are older than the evolutionist age of the Earth. ${ }^{23}$ The article admits that the dates are meaningless: "The most striking observation is that all of NWA 1950 shock melt data, and more than half of the ages derived from ALH 77005 shock melts, are impossibly ancient, older than the Solar System itself (4.567 Ga; Fig. 6). Moreover, ancient ages ( $>4.567 \mathrm{Ga}$ ) from shock melts are known in meteorites, in articular the Peace River L6 chondrite, studied by $\mathrm{Ar}-\mathrm{Ar}$ stepped heating and localized outgassing by a laser probe (McConville et al., 1988)." ${ }^{24}$ The article concludes with the following remarks: "Our Ar-Ar results for shock melts-ages in $>4.567 \mathrm{Ga}$ and $40 \mathrm{Ar} / 36 \mathrm{Ar}$ ratios that overlap with previous measurements of the Martian atmosphere-indicate that shock melt 'ages' are meaningless in terms of any real event." ${ }^{25}$

Table 6

| Sample | Age |
| :---: | :---: |
| Number | Million Years |
| 1 | $\mathbf{8 , 0 6 4}$ |
| 2 | $\mathbf{7 , 1 9 2}$ |
| 3 | 7,064 |
| 4 | $\mathbf{6 , 8 7 2}$ |
| 5 | $\mathbf{6 , 6 7 9}$ |
| 6 | $\mathbf{6 , 4 2 3}$ |
| 7 | $\mathbf{6 , 2 0 5}$ |
| 8 | $\mathbf{6 , 1 7 9}$ |
| 9 | $\mathbf{6 , 1 0 3}$ |
| 0 | 5,346 |
| 11 | 5,103 |
| 12 | 5,103 |
| 13 | 5,026 |
| 14 | 4,654 |

## Rhenium-Osmium Systematics Of Diamond-Bearing Eclogites

Scientists from the Department of Geological Sciences, University of Cape Town, South Africa and the Department of Terrestrial Magnetism, Carnegie Institution of Washington, preformed this dating in 2003. ${ }^{26}$ There is a 31,600 million years between the oldest and youngest dates. ${ }^{27}$ "Thus, the Re-Os model ages, when calculated relative to a mantle undergoing chondritic Os isotopic evolution, are considerably older, varying from 3.1 to 18.5 Ga (seeTable 3 for calculation parameters). Model ages older than the age of the Earth are a clear indication that at least some of the samples have not experienced the simple single-stage Re-Os evolution
required by the model age calculation. The unrealistically old $\mathrm{Re}-\mathrm{Os}$ model ages reflect $\mathrm{Re} / \mathrm{Os}$ ratios too low to account for the high measured ${ }^{187} \mathrm{Os} /{ }^{188} \mathrm{Os} .{ }^{, 28}$ The author concluded the article with the following remarks: "The scatter in Re-Os systematics reflects a complex history for these eclogites that makes it impossible to define a precise age." ${ }^{29}$

Table 7

| Sample Name | Age, Billion Years |
| :---: | :---: |
| AHM-C5 | -13.1 |
| AHM-K1/1 | 5.86 |
| AHM-K4/2 | 4.24 |
| AHM-K5/2 | 4.47 |
| AHM-K6/1 | 5.12 |
| AHM-K6/2 | 5.14 |
| AHM-K13 | 18.5 |
| AHM-K14 | 4.09 |
| AHM-K15 | 13.8 |

## A Study Of Northern Canadian Cordillera Xenoliths

These samples were dated in the year 2000 by Geologists from the University Of Montreal, Canada and from the Earth and Planetary Sciences Department, McGill University, Canada. ${ }^{30}$ The samples were taken from mountain ranges near the Canadian/Alaskan border. ${ }^{31}$ The data ${ }^{32}$ in table 8 contrasts model age versus minimum age. "The decoupling of ${ }^{187} \mathrm{Re} /{ }^{188} \mathrm{Os}$ and ${ }^{187} \mathrm{Os} /{ }^{188} \mathrm{Os}$ observed in the Canadian Cordillera xenolith data also affects the calculation of Os model ages, and leads to "future" ages or ages older than the Earth (Table 1)." ${ }^{33}$ Because the data is so bad the author admits: "Because of the apparent perturbation of the $\mathrm{Re} / \mathrm{Os}$ ratios, age information cannot be obtained from an isochron diagram." ${ }^{33}$ How can a rock that exists in the present have formed million of years in the future? Such a proposition is illogical.

Table 8

| Sample | Model Age | Minimum Age |
| :---: | :---: | :---: |
| Name | Billion Years | Billion Years |
| AL-42 | Less Than Zero | 0.46 |
| AL-46 |  | Less Than Zero |
| AL-75 | Less Than Zero | 0.43 |
| AL-76 | Less Than Zero | 0.10 |
| AL-86 | Less Than Zero | 0.52 |
| AL-88 | 0.32 | Less Than Zero |
| AL-41 | Less Than Zero | 0.48 |
| AL-52 | Less Than Zero | 0.22 |
| XLG-29A | Less Than Zero | 0.92 |
| XLG-12A | Less Than Zero | Less Than Zero |
| XLG-25A | 0.54 | Less Than Zero |
| KLX-47 | Less Than Zero | 0.33 |
| BTX-26 | Less Than Zero | Less Than Zero |

## Ar-Ar Chronology Of The Martian Meteorite

The Department of Earth Sciences, University of Manchester, dated these meteorite samples in 1997. ${ }^{34}$ The samples are believed to be material ejected from the surface of Mars billion so years ago. ${ }^{34}$ If we look at the data in table 9 we see that there is a 24,648 million difference between the oldest and youngest date. ${ }^{35}$ If we look at the dates and error margins in Table 2 in the original article we see that the maximum age is 6,047 million years and the minimum is 257 million years. ${ }^{36}$

Table 9

| Sample | Age | Age |
| :---: | :---: | :---: |
| Number | Minimum | Maximum |
| ALH84001,110 |  |  |
| 1,300 | 4,626 | 5,236 |
| 1,450 | 4,345 | 5,013 |
|  |  |  |
| ALH84001,111 |  |  |
| 1,200 | 5,138 | $\mathbf{7 , 9 8 0}$ |
| 1,300 | $\mathbf{3 , 9 0 4}$ | 5,694 |
| 1,450 | $\mathbf{4 , 1 5 1}$ | $\mathbf{6 , 3 7 3}$ |
|  |  |  |
| ALH84001,127 |  |  |
| 400 | 2,660 | 5,062 |
| 450 | 4,106 | 5,018 |
| 500 | 4,012 | 4,550 |
| 550 | 4,442 | 4,614 |
| 700 | 4,036 | 4,942 |
| 800 | 4,179 | $\mathbf{4 , 8 4 7}$ |
| 1,200 | $\mathbf{3 , 1 7 1}$ | 21,477 |
| 1,400 | 4,920 | $\mathbf{7 , 3 5 4}$ |

## The Slave Craton, Canada

These samples from Canada were dated in 2010 by scientists from the Earth \& Atmospheric Sciences, University of Alberta, Edmonton, Canada. ${ }^{37}$ Some of the specimens were dated to be over 5.5 billion years old. ${ }^{38}$ The author tells how the isochron gave absurd ages:"In contrast, the most radiogenic sulphides in sample 1636 plot about an impossible 5 Ga model isochron." ${ }^{39}$ The admission is that the dates are impossible and meaningless:"The Re-Os isotope systematics of sulphides in sample 1636 are disturbed (Fig. 6e), with three of four samples falling on an impossible 5 Ga model isochron." ${ }^{40}$

## U-Th-Pb Systematics In Lunar Highland Samples

California Institute of Technology, (Pasadena, California) dated these Lunar rocks in 1972. ${ }^{41}$ Eighty one dates are older than the evolutionist age of the Solar System. Sixty three are over five billion years old. Seven are over six billion years old. ${ }^{42}$

Table 10

| Space Probe/Sample | ${ }^{207} \mathbf{P b}$ | ${ }^{206} \mathbf{P b}$ | ${ }^{207} \mathbf{P b}$ | ${ }^{208} \mathbf{P b}$ |
| :---: | :---: | :---: | :---: | :---: |
| Luna 20 | ${ }^{206} \mathbf{P b}$ | ${ }^{238} \mathrm{U}$ | ${ }^{235} \mathrm{U}$ | ${ }^{232} \mathbf{T h}$ |
| $22001,1 \mathrm{~A}-2$ | 4.94 | 5.83 | 5.19 | 5.87 |
|  | 5.00 | 5.20 | 5.06 | 5.01 |
|  | 4.92 | 6.09 | 5.24 | $\mathbf{6 . 2 4}$ |
| $22001,1 \mathrm{~A}-2$ | 4.96 | 5.78 | 5.19 | 6.08 |
|  | 5.01 | 5.25 | 5.08 | 5.30 |
|  | 4.95 | 5.83 | 5.20 | 6.14 |
| 67481,26 | 4.92 | 5.49 | 5.08 | 5.80 |
|  | 4.94 | 5.29 | 5.04 | 5.52 |
|  | 4.92 | 5.51 | 5.09 | 5.84 |
| 64421,29 | 4.91 | 5.41 | 5.05 | 5.47 |
|  | 4.94 | 5.00 | 4.96 | 4.91 |
|  | 4.90 | 5.43 | 5.06 | 5.50 |
| 60501,31 | 4.98 | 5.35 | 5.08 | 5.26 |
|  | 4.99 | 5.23 | 5.06 | 5.10 |
|  | 4.97 | 5.36 | 5.09 | 5.28 |
| 68501,52 | 5.05 | 5.61 | 5.21 | 5.55 |
|  | 5.06 | 5.48 | 5.18 | 5.37 |
|  | 5.05 | 5.62 | 5.21 | 5.56 |
| 60025,65 | 4.64 | 6.64 | 5.18 | 5.64 |
|  | 4.75 | 3.75 | 4.42 | 2.51 |
|  | 4.62 | 7.83 | 5.45 | 7.21 |

If we run the Lead 207/206 ratios ${ }^{43}$ through Isoplot we get the following ages as listed in Table 11:
Table 11

| Pb-207/206 | Age |
| :---: | :---: |
| Ratio | Ma |
| $\mathbf{0 . 8 1 6 6}$ | $\mathbf{4 , 9 5 1}$ |
| $\mathbf{0 . 8 1 9 6}$ | $\mathbf{4 , 9 5 6}$ |
| $\mathbf{0 . 8 1 8 9}$ | $\mathbf{4 , 9 5 5}$ |
| $\mathbf{0 . 8 1 9 0}$ | $\mathbf{4 , 9 5 5}$ |
| $\mathbf{0 . 7 8 0 4}$ | $\mathbf{4 , 8 8 6}$ |
| $\mathbf{0 . 7 8 0 0}$ | $\mathbf{4 , 8 8 6}$ |
| $\mathbf{0 . 7 8 8 3}$ | $\mathbf{4 , 9 0 1}$ |
| $\mathbf{0 . 7 8 8 6}$ | $\mathbf{4 , 9 0 1}$ |
| $\mathbf{0 . 8 0 0 6}$ | $\mathbf{4 , 9 2 3}$ |
| $\mathbf{0 . 8 0 0 8}$ | $\mathbf{4 , 9 2 3}$ |
| $\mathbf{0 . 8 4 1 7}$ | $\mathbf{4 , 9 9 4}$ |
| $\mathbf{0 . 8 4 1 7}$ | $\mathbf{4 , 9 9 4}$ |
| $\mathbf{0 . 7 9 8 9}$ | $\mathbf{4 , 9 2 0}$ |
| $\mathbf{0 . 8 0 1 5}$ | $\mathbf{4 , 9 2 4}$ |

The author comments on the major problems with dating these samples: "The data for all highland soils analyzed here are shown in fig. 4. All five data points lie far above the concordia curve and give ages for a
single stage model which are in excess of 4.6 AE (see table 5). The $206 \mathrm{~Pb}-238 \mathrm{U}$ ages range up to 5.83 AE . The $207 \mathrm{~Pb}-206 \mathrm{~Pb}$ ages are also very high." ${ }^{44}$ His calculations confirm the wrong ages radiometric dating gives: "Inspection of rows D and E in table 5 shows the extreme limits of the $207 \mathrm{~Pb}-206 \mathrm{~Pb}$ ages. All highland soils analyzed have $207 \mathrm{~Pb}-206 \mathrm{~Pb}$ model ages in excess of 4.90 AE . These are the highest values observed so far for samples of 'total lunar soil'., 45

## A 40Ar/39Ar Geochronological Study

Rock samples from the Lower Onverwacht Volcanics in Barberton Mountain Land, South Africa were dated in 1992 by geologists from the Department of Physics, University of Toronto, and the Department of Geological Sciences, Queen's University, Kingston, Ontario, Canada. ${ }^{46}$ The youngest date was $4.5 \times 10^{-16}$ years. ${ }^{47}$ How can a rock that exists in the present have formed 4,500 trillion years in the future? Such a proposition is illogical.

Table 12

| Sample Number | Age, Million Years |
| :---: | :---: |
| B40-A, Third Run | $\begin{gathered} -45,000,000,000 \\ -310,000 \\ \hline \end{gathered}$ |
| B40-E | $\begin{gathered} \hline-56,112 \\ \mathbf{3 8 6} \\ 2,663 \\ 2,667 \\ 2,672 \\ 2,943 \\ \mathbf{3 , 3 2 1} \\ \mathbf{3 , 3 1 3} \\ \mathbf{3 , 2 9 9} \end{gathered}$ |
| KT-17B, FIRST RUN | $\begin{aligned} & \mathbf{6 , 5 5 5} \\ & \mathbf{6 , 2 9 6} \\ & \mathbf{4 , 9 6 9} \\ & \mathbf{5 , 1 1 7} \\ & \mathbf{6 , 1 6 4} \\ & \mathbf{5 , 2 2 8} \end{aligned}$ |
| KT-17B, SECOND RUN | $\begin{aligned} & \mathbf{6 , 8 4 8} \\ & \mathbf{6 , 4 7 9} \\ & \mathbf{5 , 7 3 1} \end{aligned}$ |
| KT-17B, Plagioclase Concentrate | $\begin{aligned} & \mathbf{6 , 2 2 4} \\ & \mathbf{6 , 9 0 4} \\ & \mathbf{6 , 5 6 0} \\ & \mathbf{6 , 5 4 4} \\ & \mathbf{5 , 1 , 5 5} \end{aligned}$ |
| B56-A, First Run | $\begin{aligned} & \mathbf{7 , 8 1 0} \\ & \mathbf{4 , 8 6 4} \\ & \mathbf{4 , 8 9 0} \end{aligned}$ |

## The Archaean Barberton Greenstone Belt

In 1998 diamond samples were dated by scientist from the Johannes Gutenberg University, Mainz, Germany, the Max-Planck Institute Chemistry, and the Centre Geochemistry, Strasbourg, France. ${ }^{48}$ According to the author the true ages is 2.7 billion years: "All three isotopic systems of whole rocks indicate ages of $\sim 2.7 \mathrm{Ga}$, much younger than the depositional age of the successions." "By treating the primary isochron slope of the Pb-isotopic data of sample OG 1 as a secondary isochron, an additional recalculation of the $208 \mathrm{~Pb} / 204 \mathrm{~Pb}$ isotopic values indicates that the $232 \mathrm{Th} / 238 \mathrm{U}(\mathrm{k})$ isotopic ratio of sample OG 1 has had a value of 4.78 from $\sim 2.7 \mathrm{Ga}$, which is slightly higher than the typical k value of $\sim 4$ (Taylor and McLennan, 1985)." ${ }^{50}$ When we run the $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ ratios listed ${ }^{51}$ in the essay through Isoplot we get dates almost 2 billion years older. A radically different answer!

Table 13

| Sample | 207Pb/206Pb | Sample | 207Pb/206Pb |
| :---: | :---: | :---: | :---: |
| Number | Million Years | Number | Million Years |
| OG-1-a | 4,557 | OG-1-x | 4,557 |
| OG-1-b | 4,544 | OG-1-y | 4,544 |
| OG-1-c | 4,554 | OG-1-z | 4,554 |
| OG-1-d | 4,476 | OG-1-aa | 4,476 |
| OG-1-e | 4,596 | OG-1-1a | 4,596 |
| OG-1-f | 4,560 | OG-1-1b | 4,560 |
| OG-1-g | 4,566 | OG-1-2a | 4,566 |
| OG-1-h | 4,499 | OG-1-2b | 4,499 |
| OG-1-i | 4,495 | OG-1-3a | 4,495 |
| OG-1-j | 4,507 | OG-1-3b | 4,507 |
| OG-1-k | 4,514 | OG-1-7a | 4,514 |
| OG-1-I | 4,518 | OG-1-7b | 4,518 |
| OG-1-m | 4,454 | OG-1-8a | 4,454 |
| OG-1-n | 4,570 | OG-1-8b | 4,570 |
| OG-1-0 | 4,477 | OG-1-9a | 4,477 |
| OG-1-p | 4,517 | OG-1-9b | 4,517 |
| OG-1-q | 4,534 | OG-1-12a | 4,534 |
| OG-1-r | 4,563 | OG-1-12b | 4,563 |
| OG-1-s | 4,510 | OG-1-13a | 4,510 |
| OG-1-t | 4,535 | OG-1-13b | 4,535 |
| OG-1-u | 4,458 | OG-1-14a | 4,458 |
| OG-1-v | 4,587 | OG-1-14b | 4,587 |
| OG | 4,488 |  |  |

## Zircon U-Pb Ages Of Guyana Greenstone

These mineral samples were dated in 1982 by scientists from the Department of Geological Sciences, Cornell University, New York and the Department of Earth Sciences, University of New Hampshire ${ }_{54}{ }^{52}$ According to the article the true age of the specimen is 2250 Million years old. ${ }^{53}$ If we run the isotopic ratios ${ }^{54}$ through Isoplot we find that there is a 43,364 million difference between the oldest and youngest date.

Table 14

| Sample | 207Pb/206Pb | 206Pb/238U | 207Pb/235U |
| :---: | :---: | :---: | :---: |
| Number | Million Years | Million Years | Million Years |
| 1a | $\mathbf{2 , 2 2 6}$ | $\mathbf{2 , 2 1 8}$ | $\mathbf{4 4 , 2 4 2}$ |
| 1b | $\mathbf{2 , 2 1 7}$ | $\mathbf{2 , 0 2 1}$ | $\mathbf{4 2 , 1 9 9}$ |
| 1d | $\mathbf{2 , 2 1 0}$ | $\mathbf{1 , 8 0 6}$ | $\mathbf{3 9 , 8 3 9}$ |
| 1e | $\mathbf{2 , 1 7 7}$ | $\mathbf{1 , 8 3 8}$ | $\mathbf{3 9 , 8 6 1}$ |
| 3a | $\mathbf{2 , 2 4 9}$ | $\mathbf{1 , 8 3 5}$ | $\mathbf{4 0 , 5 6 1}$ |
| 3b | $\mathbf{2 , 2 3 6}$ | $\mathbf{8 7 8}$ | $\mathbf{2 7 , 1 4 2}$ |
| 4a | $\mathbf{2 , 2 0 6}$ | $\mathbf{1 , 6 1 7}$ | $\mathbf{3 7 , 6 4 0}$ |
| 4c | $\mathbf{2 , 1 5 5}$ | $\mathbf{1 , 3 2 7}$ | $\mathbf{3 3 , 4 4 7}$ |
| 4d | $\mathbf{2 , 1 8 3}$ | $\mathbf{1 , 3 3 9}$ | $\mathbf{3 3 , 8 7 1}$ |
| 5a | $\mathbf{2 , 2 4 2}$ | $\mathbf{1 , 7 7 6}$ | $\mathbf{3 9 , 8 3 3}$ |

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