

Detailed oceanic floor analysis. What does it really tell us?

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J. Taylor <nchiwana@xxxxxxxxxxxxxxxxxxxxxxxx> wrote:

I do not think merely casting doubt on plate tectonics supports Expanding Earth. I think the pattern on the ocean floor shows plate tectonics is false and it supports only an expanding Earth

I looked carefully at the pattern. Here is my analysis.

First I read that webpage from Neal Adams:

<http://www.nealadams.com/EarthProject/fromthedesky.html>

He calculated the floors for each isochrons and found that it was roughly doubling every 10 MYA.

His numbers were too much perfect, so I made all the calculations myself :-)

First I got the isochron data from the ftp site at Uni of Sydney:

<ftp://ftp.es.usyd.edu.au/pub/agegrid/>

Only one file is necessary `age_1.6.grd.gz`

Then I built Mollweide projections of the earth using GMT (<http://gmt.soest.hawaii.edu/>) and the grid file. The Mollweide projection is great because it is an "equal area" projection.

I built maps showing the whole globe in black, then only continents in black, and finally maps only showing black surface of oceanic crust dating from -180 MYA to X, X being the age limit of each isochrons. I mean, I made maps showing the floor which age ranges from -180 MYA to -154.3 MYA, -180 MYA to -147.7, -180 MYA to -139.6 and so on...

All the maps are here, in png format:
<http://nachon.free.fr/MollweideCrustAge.zip>

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I used ImageJ from the NIH (<http://rsb.info.nih.gov/ij/>) and its plug-in Area Calculator to calculate the surfaces in pixels.

I got 792854 pixels for the whole globe, 226615 pixels for the continents which is exactly 28.6%, in agreement with values from the literature.

Moreover, I checked the surface of Australia as a test (11810 pixels) => 7.60 millions km². The surface of Australia in the books is 7.68 millions km². Less than 1.1% error. Not bad at all :-)

Then I plot the surfaces of oceanic floor for the different time range vs time. The curve did not display an exponential growth as claimed by Adams. Still, the growth was really smooth.

So I calculated the average growth rate for each isochrons and plot it versus time:

<http://nachon.free.fr/GrowthRate.pdf>

It is linear in function of time.

(average rate of growth)=a.t+b

a=15.8±3.2 x10E3 km²/MYA

b=2.9±0.3 x10E6 km²

correl coeff: 0.970958

0.97, a very good correlation for average rates.

So $d\text{Surf}/dt=a.t+b$

it follows that

$\text{Surf}(t)=a/2.t^2+b.t+c$

If one consider d, the origin date of rate growth ($\text{Surf}(d)=0$) then

$\text{Surf}(t)$ simplifies into:

$\text{Surf}(t)=a/2*(t-d)^2$

I used the surfaces of oceanic floor I calculated earlier, and fit the equation. I found:

a: 15.403234 ± 0.567602 x10E3 km²/MYA²

d: -186.696232 ± 2.802151 MYA

correl coeff : 0.999689

Correlation is 0.999!!!! Terrific!

Look at this graph:

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<http://nachon.free.fr/Surface.pdf>

A perfect hyperbola.

Such a perfect rate is completely unthinkable with Plate tectonics, simply because continents are not symmetric...
Yep, it looks like PT is really dead.

So expansion of oceanic floors began 186.7 ± 2.8 MYA ago and current surface growth is about 2.9 km²/year. That is a radius growth about 18 mm/year.

For those who want to make the calculations themselves, all the data are here:

<http://nachon.free.fr/data.pdf>

Cheers :-)

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Florian Nachon

"Tout est au mieux dans le meilleur des mondes possibles"
Voltaire vs Leibniz

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