Correcting the National Atmospheric and Oceanic Administrations (NOAA) Page on How the Earth's Atmosphere Formed

Jeffrey J. Wolynski Jeffrey.wolynski@yahoo.com April 26, 2020 Rockledge, FL 32922

Abstract: On NOAA's website for kids scijinks.gov/atmosphere-formation, three different atmospheres are given to try and explain the stages of Earth's atmosphere formation. The corrections are provided. We live in a very different universe than what is taught by officials.

On NOAA's website for kids: <u>http://archive.is/SXjMc</u> The 1st stage for Earth's atmosphere formation is stated:

"Earth's original atmosphere was probably just hydrogen and helium, because these were the main gases in the dusty, gassy disk around the Sun from which the planets formed. The Earth and its atmosphere were very hot. Molecules of hydrogen and helium move really fast, especially when warm. Actually, they moved so fast they eventually all escaped Earth's gravity and drifted off into space."

Corrected:

"Earth's original atmosphere was mostly hydrogen and helium, because these are the main gases in young stars, which evolve into Earth-like objects. The Earth and its atmosphere were very hot. Molecules of hydrogen and helium move really fast, especially when hot. Actually, they moved so fast they eventually all escaped Earth's gravity and drifted off into space. We even see various stages of how much of this hydrogen and helium is lost in our own system. Jupiter and Saturn have lost a lot of their hydrogen and helium, Neptune and Uranus have lost even more."

2nd Stage:

Earth's "second atmosphere" came from Earth itself. There were lots of volcanoes, many more than today, because Earth's crust was still forming. The volcanoes released

*steam (H2O, with two hydrogen atoms and one oxygen atom), *carbon dioxide (CO2, with one carbon atoms and two oxygen atoms), * ammonia (NH3, with one nitrogen atom and three hydrogen atoms).

Corrected:

Earth has never had a second atmosphere, as the atmospheres of stars are on a slow continuous metamorphosis. All atmospheric material was totally provided by the Earth itself during its evolution, including the vast amounts of hydrogen and helium. Earth's internal crust did form while its atmosphere lost mass and internally differentiates itself into crustal material and primeval biological molecules. The Earth's early Jovian atmosphere formed the ammonia, carbon dioxide and steam, when Earth was cool enough and had lots of time to mix up and combine the elements into molecules. We even have pictures of this process provided by the Juno Spacecraft.



Jupiter by NASA's Juno spacecraft. Look at all that chemistry! This is what a ~700 million year old star looks like. This is probably what Earth looked like 3.8 billion years ago.

3rd stage:

"Much of the CO2 dissolved into the oceans. Eventually, a simple form of bacteria developed that could live on energy from the Sun and carbon dioxide in the water, producing oxygen as a waste product. Thus, oxygen began to build up in the atmosphere, while the carbon dioxide levels continued to drop. Meanwhile, the ammonia molecules in the atmosphere were broken apart by sunlight, leaving nitrogen and hydrogen. The hydrogen, being the lightest element, rose to the top of the atmosphere and much of it eventually drifted off into space."

Corrected:

"Much of the CO2 dissolved into the oceans as well became rocks and minerals. Eventually, the thick ocean world became full of simple bacteria and life forms which lived in an exotic atmosphere full of still dissipating methane and ammonia gas, alongside oxygen gas. Eventually the methane and ammonia dissipated back into space due to lack of hydrogen boding as water has, and the oxygen gas remained due to it having been dissolved in the Earth's extremely thick ocean. The ammonia was also broken up into hydrogen and nitrogen gas, and that hydrogen then floated back into space and some nitrogen stayed as well."

Below is a graph showing the extreme mass change and time scales involved in forming atmospheres. Notice how it is a smooth continuum, not a staged process as is given by NOAA. The Earth was extremely massive and hot in its past, and the atmosphere dissipated slowly as it evolved and formed. This is the only holistic approach to star science that I have come to accept. The discovery that Earth and all the planets are ancient and dead stars will be taught to everybody one day. What a sight that will be! Planets and stars are the same exact objects. Totally incredible!

