**Corrections for *From Crust to Core* ISBN 9781108426695**

Changes in red and additional text in blue.

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ANTOINE LAURENT DE LAVOUSIER: COMBUSTION AND RESPIRATION

This section includes a summary of the content and bibliographic references from two original articles by Galvez and Gaillardet (2012)13 and Galvez (2013)14. For complementary background and references, please refer to those earlier Deep Carbon Observatory works.

In France, by the end of the eighteenth century, the quest to understand how living organisms interact with atmospheric gases came to dominate the research frontier of carbon science…

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His young assistant, the chemist Armand Séguin (1764–1835), breathed oxygen through a face mask while Lavoisier observed the increase in breathing rate and pulse (Figure 6.5).15

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In a geochemical aside, he remarked that there could be no doubt that elemental carbon “is part in a number of combinations in the three kingdoms – minerals, plants and animals,” although he did not outline the changes in the form carbon must take to pass from the mineral (coal) to the planet and animal kingdoms.16

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He next set out an organizational framework for his proposal: a progressive vertical chain, ascending from the lowest (simple) forms to the highest (complex) forms of life. Lamarck’s philosophy became controversial, and it was in conflict with Cuvier’s that rejected evolution.17

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Inquiries of professors at Cambridge produced “a young man of promising ability, extremely fond of geology and indeed all branches of natural history”: Charles Darwin.18

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By considering the uplift and subsidence of oceanic islands, he deduced that the footprint of oceanic islands can change gradually over time.19

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Here’s Darwin again, perceptively pointing out: “We here see the principle of natural selection shadowed forth,” but, he continues, Aristotle did not have the knowledge to comprehend this.20

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