# **EARTH SCIENCES HISTORY**

# JOURNAL OF THE HISTORY OF THE EARTH SCIENCES SOCIETY

EDITED: David R. Oldroyd







Volume 29, Number 1

2010

### EARTH SCIENCES HISTORY

Journal of the History of Earth Sciences Society

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**HESS logo:** Athanasius Kircher's (1602–1680) *Systema ideale prophylaciorum*—imagined view of subterranean fires and surface volcanoes, from *Mundus subterraneus*, 1678, Vol. 1, between pp. 186 and 187.

**Front-cover images:** Above: Chimborazo, viewed from the west. Photo Francesco Bailo, Wikipedia Commons. Below: Equivalent digital elevation model view.

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## **EDITOR'S INTRODUCTION**

### DAVID R. OLDROYD

With this issue *Earth Sciences History* moves into another decade, entertaining high hopes for its future and for studies in the history of our branch(es) of science.

The articles in this issue are undoubtedly varied and we hope interesting. John Smallwood leads off with a beautifully illustrated paper on the gravimetric work of Bouguer in South America and a rather intricate argument about its accuracy or otherwise, checking the matter by using modern data and calculations. His conclusion is that Bouguer's work was sound and his reputation (for work done in the face of formidable difficulties) is redeemed.

Next **Bruce McMillan** provides a most interesting and detailed account of the history of the researches on Mastodon bones by the Osage River in Missouri, some of which found their way to Europe and provided evidence for debates relating to the large mammals of the Old and New Worlds.

There follow two papers of a biographical character. Lois Arnold completes her study of the palaeontologist Carlotta Maury, in the second (not always happy) part of her career. The first part of the paper appeared in Volume 28, No. 1. David Branagan provides the first half of another two-part paper—on the life and work in Australia of Edward Pigot, who created an important geophysical research laboratory in the grounds of a prestigious boys' school in Sydney. Important seismological and astronomical work was done there, and we get a detailed view of the dedicated scientific work of a Jesuit priest in the context of his religious establishment. This work made him quite a prominent figure in his day.

We then turn northwards to Scandinavia with a study by **Artur Svansson** of the theoretical and experimental work on ocean currents of the Swedish oceanographer Walfrid Ekman, remembered particularly for the 'Ekman spiral', though he is widely recognised more widely as an important figure in the history of oceanography.

Then back again to the antipodes, with a paper by **Barry Cooper** on the early investigations in South Australia, which revealed convincing evidence for ancient glaciations in the southern continent, and the debates to which these discoveries gave rise.

The final paper by **Duane Buhay** and **Randall Miller** deals with an important early institutional library in New Brunswick, which provided valuable support for geological work in that part of Canada in the nineteenth century, and the collections of which formed the basis of the library of the present New Brunswick Museum.

It was with great regret that I learned of the death of the historian of early geology, Rhoda Rappaport of Vassar College. We never met but an early paper of hers helped me find a topic for my PhD and subsequently she was a sympathetic and encouraging thesis examiner, for which I am naturally most grateful! A sensitive obituary is provided for us by her former colleague at Vassar, **Jill Schneiderman**.

It is not our wish to have too many 'divided' papers in *Earth Sciences History*, and it is hoped that the edict about the length of papers introduced last year will discourage them. But we can look forward to Part 3 of Davis Young's epic study of the origin of the CIPW classification in the next issue. It was ready for publication in the present number but has been held over because of the two other 'divided' papers in the present issue.

Finally it may be mentioned that the journal will be published in April and October this year and in the future rather than March and September. This allows more time for the subscription list to be finalised each year so that the appropriate number of copies can be printed.