

IAP 2008 12.091 Assignment 2

This is a study assignment.

You may be able to get the journals on line through the library license.

These journals are also available in hard copy and in pdf format.

1. Study the Chicxulub Impact Crater facts

Suggested reading:

The Chicxulub impact event and its environmental consequences at the Cretaceous– Tertiary boundary,

David A. Kring,

Palaeogeography, Palaeoclimatology, Palaeoecology, 255 (2007) 4–2.

2. Study the Sudbury Impact Structure

Suggested book:

French, B. M., and N. M. Short, eds. "Sudbury Structure, Ontario: Some Petrographic Evidence for an Origin by Meteorite Impact." In *Shock Metamorphism of Natural Materials, Proceedings of the First Conference held at NASA, Goddard Flight Center, Maryland, 1966*. Baltimore, Md.: Mono Book Corp., 1968, pp.383-412. (Library of Congress Catalog No. 68-59422.)

3. Study the Mjolnir Impact Structure

Suggested reading:

Traces of the marine Mjølfnir impact event

H. Dypvik, M. Smelror, P. T. Sandbakken, O. Salvigsen, E. Kalleson,
Palaeogeography, Palaeoclimatology, Palaeoecology 241 (2006) 621–636.

4. Study the Vredefort Impact Structure

Suggested reading:

Magnetic imaging of the Vredefort impact crater, South Africa,

M. Muundjua, R. J. Hart, S. A. Gilder, L. Carporzen, A. Galdeano
Earth and Planetary Science Letters 261 (2007) 456–468.

5. After reading about the impact craters

- i. What are the main features by which the terrestrial impact craters are identified?
- ii. What is your understanding of the importance of the studies of Chicxulub, Sudbury, Mjolnir and Vredefort?
Write briefly about each crater.

Due Date: End of the Course (Last date Feb 4, 2008)

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