

## **3D digital model database for the type specimens of Cretaceous ammonoid in Japan**

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When finding a fossil, researchers need to decide whether the fossil is new or a known species by way of consulting systematic descriptions, photographs and illustrations from a huge number of past papers. Recently, development of electronic journals is removing the burden to gather numerous papers. However, the best way is to directly observe the type specimens thus making it possible to check its characteristic features in detail. There is no easy way for researchers to gather numerous papers and to make a search of specimens housed in research institutes such as universities and museums.

Recently, many research institutes publicize databases of digital images of paleontological specimens on the Internet. Occasionally, digital images of type specimen are also made available online. The 3D digital models are useful, because they give us sterical recognition of a specimen. As a pioneering work, the GB3D type Fossils Online (<http://www.3d-fossils.ac.uk/home.html>) share 3D digital models of type specimens, held in British collections, via the Internet.

Cretaceous marine strata which has yielded abundant ammonoids are widely distributed throughout Japan. Over 300 new species of Cretaceous ammonoid have been reported by researchers, and over 600 the type specimens are held in Japan.

It is our aim to share on the Internet 3D digital models of the type specimens of Cretaceous ammonoid, which are housed in various research institutes of Japan. Using our 3D scanner, I plan to put 3D digitalised images of the type specimens on the Internet as an on-going project. If this projet spreads across catalogues and countries, it will become significantly contribute to research fields such as taxonomy and biostratigraphy.

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