

Electron microscopic analyses and minor compositions of Akiyoshi-dai limestones: Comparative analyses of meteoritic elements

Yasunori Miura[1]

[1] Earth Sci., Yamaguchi Univ

1. Introduction

Carbon-bearing minerals and chemical composition are compared with Akiyoshi limestones on surface and drilled samples and impact limestones from Sierra Madera impact crater Texas, U.S.A.

2. Akiyoshi-dai limestone

Carbon-bearing limestones are found in Akiyoshi drilled samples (esp. 234m and 243m in depth) and Sierra Madera impact samples. Both samples contain significant amounts of iron-group and platinum-group elements.

3. Sierra Madera impact crater

Impact limestone from Sierra Madera impact crater shows shatter-cone texture with anomalous contents of meteoritic components of iron-and platinum-group elements. Red-layers contains more abundant of meteoritic components. However drilled samples of Akiyoshi-dai samples (234m and 243m in depth) contain several times higher meteoritic components than those in Sierra Madera impact crater.

4. Summary

Akiyoshi limestones breccias contain anomalous meteoritic components of iron- and platinum-group elements than those of Sierra Madera impact crater, Texas, U.S.A. Akiyoshi-dai limestone cannot be explained by general hydrothermal events or volcanic intrusions.