

Fe-Ni-Co micrograins of Takamatsu drilled samples

Yasunori Miura[1]

[1] Earth Sci., Yamaguchi Univ

1. Evidence of meteoritic impact at active crustal regions:

Meteoritic body is broken to micro-grains on impact. Basement rocks are Glassy and brecciate by shock metamorphism. On active crustal regions of Japan islands are buried and deformed by volcanic intrusions inside and outside the crater which indicate that original impact texture is difficult to be remained. Therefore, Fe-Ni-Co grains of meteoritic components is considered to be great indicator of meteoritic impact at active crustal regions

2. Fe-Ni-Co meteoritic grains at drilled samples of Takamatsu MKT buried structure.

The following results are obtained from drilled samples of 1,750m at Takamatsu MKT buried structure. (1) Rocks layers are changed remarkably to 5 main rock layers and 14 small rock layers, whereas 3 rock layers are found at drilled samples of Goshiki-Dai plateau. (2) Basement rock of granite can be found from 1,130m. (3) Melt breccias in crater sediments contain meteoritic components of Fe, Ni and Co elements.

3. Summary:

Previous model of volcanic caldera cannot be accepted by rock change. Depression cauldron was not accepted by few relative rock-change. The present of Takamatsu MKT buried structure is deformed by the young and small volcanic intrusions.