

Comparative analyses of minor compositions of drilled samples : Germany Ries crater and Takamatsu crater

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1. Introduction

Drilled breccias of Germany Ries crater are introduced due to first granitic samples which was formed at the same time of Takamatsu crater in Japan.

Textures and compositions of drilled samples from Takamatsu crater, Japan are compared with those from Ries crater in Germany.

2. Ries crater samples

Surface and drilled samples (500m and 1000m in depth) are obtained to study breccias of granitic and limestone as target rocks.

Drilled samples of Ries crater (offered by Ries crater Museum) show similar contents of meteoritic components at granitic breccias.

3. Texture and compositions of Takamatsu crater

Takamatsu crater is broken at perpendicular and horizontal directions by island formation which is intruded by volcanic intrusion mainly at south rim.

Drilled samples of 930 m and 960m in depth shows meteoritic components of iron-group (Fe, Co, Ni) and Iridium which is similar

data of Sierra Madera and Ries craters.

4. Summary

1) Takamatsu crater was broken at perpendicular and horizontal directions, where volcanic intrusions at south rim can be found with shocked and broken mineral textures.

2) Drilled samples of breccias from Takamatsu crater show similar anomalous content of meteoritic components of iron-group (Fe, Ni and Co) and iridium contents as comparative study.