Geodynamics Seminar

第318回ジオダイナミクスセミナー
（特別セミナー）

Investigation of intermediate and deep seismicity using acoustic signal monitoring during multi-anvil press experiments

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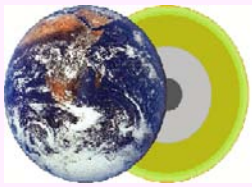
主催：愛媛大学地球深部ダイナミクス研究センター
日時：2/13（月）午後 4時30分～
場所：総合研究棟 4F 会議室



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Abstract

Acoustic emissions monitoring technique has been recently used during DIA and D-DIA experiments coupled with classic diffraction techniques using synchrotron light sources. These experiments have been proved to be a very efficient way to study the relations between mineral reactions, deformation and seismicity.

First, I will summarize how the setup was developed and discuss some technical aspects. Then I will focus on results from two distinct studies on serpentinite dehydration and Ge-Olivine (Mg_2GeO_4).

For fast kinetics, serpentinite dehydration was found to be aseismic, which highlights that the classic view of dehydration embrittlement is not as straightforward as one may think. On the other hand, D-DIA experiments on Ge-Olivine evidenced an unambiguous interplay between the alpha-gamma transition and the production of acoustic emissions. This allowed us to precise the conditions required to generate seismicity at great pressures.

詳細は当センターホームページ: http://www.ehime-u.ac.jp/~grc/をご覧ください
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