

# Introduction of the method of facies analysis to green tuff

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Green tuff is mainly composed of subaqueous volcanoclastics and related sediments altered by hydrothermal process. It is the key sediments for the elucidation of the tectonics of the northeast Honshu from Miocene. The stratigraphical studies have been carried since early times. The stratigraphical data were summarized in the early of 1990s by Yamaji(1990) and Sato and Amano(1991) related to the formation of Japan Sea. These studies were based on the biostratigraphy of microfossils, the radiometric ages, the thickness of sediments and paleo-depth etc. which had been gained at that time.

After that time the conspicuous development of the investigation on green tuff have not been recognized. One of the reasons would be that we could not find the new methods of study. On the other hand the facies analysis for the subaqueous volcanoclastics was carried on the good outcrops along seashore.

I would like to propose the application of the method of facies analysis to green tuff distributed widely in inland provinces of the northeast Honshu which would take a new turn in the study of the tectonics of the evolution of island arc. The examples of the results of facies analysis on green tuff in the South Fossa Magna, the Tanakura tectonic line and the Ou backbone regions can be shown.

## (References)

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Yamaji, A., 1990, *Tectonics*, 9, 365-378.