

## A general-purpose automatic classification system of electromagnetic waves observed by scientific satellites

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The total amount of the datasets obtained by scientific satellites is so large and it is quite difficult for researchers to find special events which they are interested in. We developed a new computational technique for classifying plasma waves in a systematic way from the VLF/ELF wave database of Akebono satellite in order to assist the researchers to find a particular wave phenomenon.

In the present study, we improved this technique into a general-purpose system which is applicable to plasma waves obtained by other plasma wave instruments.

In the system, memory consumption and calculation time were drastically reduced compared with the conventional method. The classified results are archived in a database system. We also developed a search engine which retrieves the classification results and displays the result on the web browser.

In the presentation, we will introduce current design of our system.